



**Cambridge House**  
BRITISH INTERNATIONAL SCHOOL  
VALENCIA

## Cambridge House British International School

### Parent Handbook: Sixth Form

2025 -  
2027



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Dear Parents and Students,

This booklet is about the Sixth Form at Cambridge House British International School. It gives information about the courses we offer and the choices that must be made by students at this stage of their educational career.

This handbook is designed to help parents understand life in our Sixth Form. Should you have any further questions please contact a member of our team.

### **The Sixth Form Team**

- Head of 6th Form: Alicia Hilton
- Technical Director: Ana Más
- Head of Year 12: Jack Reilly
- Head of Year 13: Russell Muir
- Head of BTEC: Ruth Tadina

Cambridge House British International School contributes to the development of unique individuals in a unique environment. It is a place where students learn to understand and respect themselves, each other and the international community. We are dedicated to promoting lifelong learners who explore, participate and contribute throughout society showing tolerance and compassion with the confidence to make a difference.

### **Our mission**

*We prepare our students to shape tomorrow through excellence in British education, with a global perspective*

### **Our vision**

*To be the first-choice international school in Valencia, building a community of lifelong learners for a better future*

### **Our School Values**

- Enthusiasm
- Kindness
- Community Spirit
- Curiosity
- Perseverance

### **The Sixth Form: overview**

The school provides a diverse academic curriculum through our A Level choices and includes vocational qualifications through our BTEC programmes. We have a commitment to providing an appropriate education for all our students, regardless of their ability range and preferred learning style.

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It is the aim of Cambridge House British International School to provide our post-16 students with a stimulating and purposeful curriculum, leading to qualifications which are internationally recognised and accepted as entry requirements for university. Students will benefit from an education through the medium of English and are offered not only a broad and balanced curriculum, but also opportunities to develop into responsible members of the adult community who are able to offer a variety of skills when seeking future employment.

Any student who aspires to join our Sixth Form must demonstrate a high degree of self-discipline and motivation and be prepared to put in the maximum effort to succeed in their goals. Students must apply to enter our Sixth Form and they will be invited for an interview with a senior member of staff.

Our Sixth Form programme includes 18 subject options at A Level and 10 Spanish PCE Selectivo options. Consequently, students will be allowed to prepare for between 3 and 5 A Levels plus 2 or 3 Selectivo subjects. In addition, we offer 2 BTEC Level 3 courses in Sports Business Management and Business and Management. Both A Levels and the BTEC courses provide students with the Spanish 'Título de Bachiller' and 'Acceso a la Universidad'.

Our Sixth Form students are well prepared for local and national Spanish universities but also universities based in the UK, USA, Holland and other European countries. Recently, our students have chosen to study Engineering, Astrophysics, Medicine, Biomedical Science, Law, International Business, Maths, Physics, Psychology, Computer Science, Graphic Design and Art, Drama and Liberal Arts.

### **A Levels**

A Levels are recognised worldwide as a requirement for entry into university. Study and examination at A Level give students in-depth knowledge and life-long skills that prepare them for success in higher education and future employment. A Levels take two years to complete and offer a flexible course of study that gives students the freedom to select the subjects that are right for them. The AS element of the A Level is examined at the end of the first year, that is to say, at the end of Year 12.

Students choosing A Levels are expected to have at least five grade C/grade 4 or above at IGCSE level, including English, Mathematics and/or Science. However, subjects have minimum requirements at IGCSE to take the subject at AS/A Level.

AS and A Level examination sessions take place in May/June, with results issued in August. Students do not just sit written examinations, they also have orals, practical or coursework depending on the subject. Consequently, a wide range of assessment processes and techniques are used to supplement formal written examinations in various subjects where they are the most effective and appropriate means of measuring attainment.

### **BTEC Level 3**

Our BTEC Level 3 courses in Business Management and Sports Business Management offers students a more specialised and professional course. Each course consists of 16 subjects over two years and students are assessed in various ways, including reports, presentations, interviews, blogs and group work. Students are able to combine the BTEC Level 3 course with one A Level (normally Spanish) and two selectivo subjects (Matemáticas Aplicadas, Economía and Geografía)

## **Curriculum**

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The Sixth Form spans two school years (Years 12 and 13) during which students prepare for AS and then A levels or the BTEC programme. The A Level subjects chosen in Year 12 are continued into Year 13. The BTEC curriculum requires students to pass each of the 8 units in Year 12 before moving into Year 13. Our aim is to enable each student to achieve their academic potential, prepare for a degree that most suits them and gain the maximum points for entry to university.

Given our policy of inclusion, which recognises the importance of catering for every student's unique capability, we aim to select, for each student, the optimum number and choice of subjects to enable them to compete at the highest level, making the most of their individual skills and ability.

Prior to applying for a place in our Sixth Form, students should consider very carefully the high standard required. The school expects any student embarking on Sixth Form studies to be prepared to work in a mature and independent manner and with self-discipline; completing subject assignments on time, researching for coursework and preparing their chosen subjects at the very highest level. For this reason, Year 11 students are expected to submit an application for a place in the Sixth Form and be interviewed by a senior member of staff.

In addition to our educational pathways, we also offer our students enrichment activities during daily tutorial. The activities help students prepare for university and the world of work. One of these activities includes the university platform Unifrog.



**A Level, Spanish and Selectivo Option choices 2025/6**

Option Block 1		Option Block 2		Option Block 3		Option Block 4		Option Block 5	
Biology		Chemistry		Mathematics		Biology		Mathematics	
Physics		Mathematics		French		Physics		Media Studies	
Business		Business		Art		English Literature		French	
Geography		History		Physical Education		French		Travel & Tourism	
Drama		Computer Science		Italian		Italian			
		Travel & Tourism		Music					
Spanish	Economía	Spanish	Economía	Spanish	Física	Spanish	Fund. del Arte	Spanish	Economía
Mates Aplicadas	Mates II	Química	Mates II	Geografía	Biología	Mates Aplicadas	Mates II	Física	Química
Dibujo Técnico	Historia del Arte			IAL Spanish	Mates Aplicadas	IAL Spanish		Biología	

Economía now called Empresa y Diseño de Modelos de Negocio (Economía)



### BTEC Level 3 Business Management

	Semester 1	Semester 2
<b>Year 1</b>	<ul style="list-style-type: none"><li>● Business Decision Making</li><li>● Business Finance</li><li>● Exploring Business</li><li>● Team Building in Business</li></ul>	<ul style="list-style-type: none"><li>● Business Decision Making</li><li>● Training and Development</li><li>● Research and Plan a Marketing Campaign</li><li>● Business Ethics</li></ul>
<b>Year 2</b>	<ul style="list-style-type: none"><li>● Human Resources</li><li>● Principles of Management</li><li>● Managing an Event</li><li>● Branding</li></ul>	<ul style="list-style-type: none"><li>● Investigating Customer Service</li><li>● Creative Promotion</li><li>● Career Planning</li><li>● Pitching for a New Business</li></ul>

### BTEC Level 3 Sports, Business & Management

	Semester 1	Semester 2
<b>Year 1*</b>	<ul style="list-style-type: none"><li>● Sports Tourism</li><li>● Business in Sport</li><li>● Ethics, Behaviours and Values</li><li>● Sports Journalism</li></ul>	<ul style="list-style-type: none"><li>● Nutrition for Physical Performance</li><li>● Sports Psychology</li><li>● Marketing Communications</li><li>● Marketing Careers in the Sport &amp; Active Leisure Industry</li><li>● History of Liverpool Football Club</li></ul>
<b>Year 2*</b>	<ul style="list-style-type: none"><li>● Research Project in Sport</li><li>● Enterprise and Entrepreneurs</li><li>● Sports Performance Analysis</li></ul>	<ul style="list-style-type: none"><li>● Research Project in Sport</li><li>● Fitness Testing</li><li>● Organising Events in Sport &amp; Physical</li></ul>



	●Health, Wellbeing & Sport	Activities ● Self Employment in Sport & Physical Activity
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\*optional subjects to be confirmed

### Additional activities and skills

Optional sports activities, music, drama and art are also made available to students. The drama department is of a high quality and performs regularly in local theatres. We also participate in a variety of cultural programmes such as the opportunity to support motor-challenged students on their trip to Lourdes (during Easter), the European Youth Parliament and the Model United Nations, helping them to focus on their public speaking skills, knowledge of current affairs and debating technique with students from other schools. We also have a Senior Student Council that students can apply to join and a volunteering programme with our younger students.

### Access to universities

#### UK and International

Alongside entry via A level, Universities will consider students' achievements in BTEC Level 3. Throughout Year 12, but specifically at the beginning of Year 13, students will decide whether to apply for a UK university through UCAS (the University Clearing and Admissions' Service). The school helps prepare students' academic paperwork for all universities and will help them make the best university choice.

#### Direct Access and Homologación for Spanish universities

If staying in Spain, students may apply to local and national universities in Spain. The school deals with the admissions process on behalf of the students; this is called 'Acceso Directo' or 'Homologación'. Valencia is lucky to boast two excellent public universities and several well-known private ones. The school psychologist is an expert in universities and career selection and is available throughout the Sixth Form to discuss options with the students.

The current Spanish law allows students to apply for university access via their A Levels, but students must be aware prior to entering Sixth Form of strict university entrance requirements. For example, Science students will study two Spanish Selectivo subjects chosen from Biology, Maths, Physics, Chemistry and Technical Drawing and Social Science students will study two subjects from Spanish Geography, History of Art, Fundamentals of Art, Mathematics applied to social sciences and Economics. These two Spanish specific subjects are optional and assessed with a weighting factor according to conversion tables created by the universities themselves. It is very important that the students choose these subjects carefully. For students who decide in year 13 to opt for Homologación an additional two Selectivo subjects (Inglés, Francés, Italiano) and Lengua Española will be added to their timetable in Year 13.

Information is given to parents and students during the second term of year 11, prior to entry into the Sixth Form. Students are asked to make provisional option choices with final choices being made once IGCSE external results are issued in August.

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## University preparation provision

Cambridge House offers university guidance and support during the Sixth Form. Information is shared with students and parents in many ways:

- Annual parent webinar for all parents about the British educational system and entry to university
- Parents' information afternoon with year 11 parents (February) about options and entrance to university
- University fairs during the year including visits to the local state universities in year 12 and 13, annual international university fair held at school in March for year 10, 11, 12 and 13 students and parents, online university fair in October (Unifrog) for year 12 and 13 students, Invite to the Unitour fair held in Valencia during the first term for year 11, 12 and 13 parents and local university open day invites posted on Teams for year 12 and 13 students
- Use of the Unifrog platform for KS4 (year 10 and 11) and Sixth Form through tutorial and reinforced through Teams
- In house school counsellor to guide students, meet individual parents and offer one to one support with international university applications
- University guidance advice for Spanish universities with the school's educational psychologist
- Full administrative support of applications to state universities





**The UCAS tariff points:**

		A*	A	B	C	D	E
UCAS points	AS		20	16	12	10	6
	A-Level	56	48	40	32	24	16

**British & Spanish system equivalence table:**

UCAS Conversion table Spain			
UCAS	Spain	UCAS	Spain
48	5.00	144	7.73
56	5.23	152	7.95
64	5.45	160	8.18
72	5.68	168	8.41
80	5.91	176	8.63
88	6.14	184	8.86
96	6.36	192	9.09
104	6.59	200	9.32
112	6.82	208	9.54
120	7.04	216	9.77
128	7.27	224	10.00



<b>136</b>	<b>7.50</b>		
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### **Expectations**

Our Sixth Form students are young adults aged between 16 and 18 and they have reached a post-compulsory stage in their education. For these reasons, we give them more freedom and privileges than the other students. However, the Sixth formers are expected to set an example to the younger students and we require from them a high degree of responsibility and excellent behaviour.

### **Off school site**

Students are expected to attend school every day at 9:10am for registration and stay on site until taught lessons are completed. Year 12 parents can choose to permit their child to be allowed to leave the school premises once timetabled lessons have finished for the day. When off site, students are the parents' responsibility; therefore, parents should consider carefully whether to give this permission. Year 13 parents can choose to permit their child to be allowed to leave school if they do not have a timetabled lesson.

### **Study areas**

Students are welcome to use the two recently refurbished study areas available to them during study periods, or alternatively they can use the subject specific quiet rooms around the school.

### **Tutorial**

Tutorial time takes place every day between 9:10 and 9:30. It is the time when students see their tutor. It is, therefore, important that students be punctual as the morning register will be taken. In addition, various enrichment activities and important notices are given out during this time.

### **Sports**

During the school day, students can play basketball or football when the courts have been scheduled for the Sixth Form. Students also have the possibility to be selected to represent the school at various sporting events throughout the year.

### **School cafeteria**

Sixth Form students are allowed to purchase snacks and drinks from the school cafeteria during break time.

### **Dress rules**

The Sixth Form dress code is very simple. It reflects the standards expected in business and professional workplaces. Additionally, we believe the dress code should set an example to the younger members of the school community, parents and visitors to the school. A full breakdown of the dress code is available here. As a reflection of our diverse community, we offer a gender-neutral dress code.

### **Appropriate attire:**

- Shirt
- High-neck jumper
- Polo shirt
- T-shirt without large logos
- Jeans/trousers without rips
- Appropriate skirt
- Jacket

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- Proper footwear

### **Inappropriate attire:**

- Flip flops
- Caps and hats
- Inappropriate messages on clothes
- Skirts, shorts or tops that are too short
- Swimwear
- Tracksuits

Students should not have visible tattoos or extremes of hair colour. Failure to adhere to the above dress rules or any other expectation set by the school, will be dealt with in accordance with the school's discipline policy.

### **Attendance**

The Sixth Form operates a policy of a minimum requirement of 90% attendance. We understand for some students there are exceptional circumstances e.g. elite sporting commitments. In these cases, we would work with families to offer our support. In other cases where school has concerns around attendance impacting on progress we would speak to families and consider appropriate next steps. In cases where school has serious concerns, we would discuss whether the students should continue with their academic programme.

### **Discipline**

All disciplinary procedures common to the rest of the students apply to the Sixth Form student. Discipline is extremely important for this age group, and we need strong cooperation between parents, tutors and teachers. To achieve it, we will maintain close communication with parents and inform them about any discipline concerns regarding their children if we feel it necessary. The school behaviour policy is available on the school's website.

### **Summary of expectations:**

- Respect every member of the school community.
- Be punctual to registration and all lessons
- Be organised.
- Work hard to maintain a high standard of education.
- Participate in class and interact positively with teachers.
- Respect school regulations.
- Make maximum effort to ensure the highest possible grades.
- Be responsible and act as a good example for the rest of the students in school.

### **Continuation at the Sixth Form**

If the school feels students are consistently not meeting the expectations set out above, they will work with families to address the issue. If the required improvements are not seen over time the school will consider the students' future on the A Level, BTEC or Selectivo programme.

### **Promotion from Year 12 to Year 13**

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A Levels, BTEC and Selectivo courses are much more demanding and challenging than IGCSEs, so we insist upon a high effort level from the students from the very first day of school. We work closely with families, so that their children achieve their highest potential and acquire adequate habits of individual and independent study as well as exemplary behaviour.

The effort level will be judged in a rigorous and objective way, based on individual and specific work, and assessed through staff meetings, in which the effort made by each student will be discussed and a conclusion to whether they are achieving their potential will be made. Students must be aware that unless they show clear evidence of effort, preparation and motivation, they will not be registered to sit the external examinations. They will, instead, be assessed internally at the end of the year to decide whether they are given the opportunity to continue.

At the end of year 12, if a student fails two AS subjects, they may be recommended to repeat the year due to the lack of an educational base to achieve success in year 13 and move onto university. In subjects where there are no external exams at the end of Year 12, students will be asked to sit internal assessments. These internal assessments will then be used to decide whether students are allowed to progress from Year 12 to Year 13.

#### **Use of mobile phones & electronic devices**

In Year 12 and Year 13, the students are permitted to use mobile phones and devices, but only for educational purposes and only within the sixth form areas. They cannot walk around the school site using their mobile phone or with earphones.



### Subject information

Students should consider carefully which subjects they wish to study at A level and Selectivo or which BTEC course is more suitable for them. The school operates expectations that students will maintain a minimum requirement of A Levels throughout their time at the Sixth Form. Please see the table below.

Sixth Form Pathways (Year 12 and 13)			
Pathway	AS Level	Selectivo	Hrs of study
1	4 Including Spanish*	2 or 3	27-30
2	4	2	30
3	5	0	30
4	BTEC Business or Sport plus 1 A Level and optional 2 Selectivo subjects: 21 + up to 9 hours Guided Learning study (27 hours)		

\*Full A Level Spanish sat in June of year 12 or IAL Spanish to be studied over two years



### Minimum expected grades for entry into A Level subjects

Subject	Minimum requirement recommendations for A level study
<b>Art</b>	minimum grade C in the relevant subject. Students without this are advised to do a drawing test beforehand to assess suitability for this subject at A Level.
<b>Biology</b>	minimum grade BB in Co-ordinated Science
<b>Business</b>	minimum grade 6 in Business (preferably grade 7), and/or minimum grade 6 in English Literature/English First Language
<b>Chemistry</b>	minimum grade BB in Co-ordinated Science and minimum grade B/8 in Mathematics
<b>Computer Science</b>	minimum grade 6 in Computer Science
<b>English Literature</b>	minimum grade 6 in English Literature and English First Language
<b>French</b>	minimum grade 6 (preferably a grade 7).
<b>Geography</b>	minimum grade 5 in Geography, and/or C or 5 in Maths and English Language
<b>History</b>	minimum grade 5 in History, and/or minimum grade 6 in English Literature or English First Language
<b>Italian</b>	minimum grade 6 (preferably a grade 7).



<b>Mathematics</b>	minimum grade 7 (Edexcel) or minimum grade B (CIE), preferably 9/A/A*
<b>Media Studies</b>	Minimum grade 5 in a related subject or minimum grade 5 in English Language
<b>Music</b>	Minimum grade 7 in the relevant subject
<b>Physics</b>	Minimum grade BB in Co-ordinated Science and minimum grade B/7 in Mathematics
<b>Physical Education</b>	Minimum grade C in the relevant subject or minimum grade 5 in English First Language
<b>Travel &amp; Tourism</b>	Minimum grade C in Travel and Tourism or minimum grade C/5 in English & Maths and recommendation that student has studied a Humanities IGCSE.
<b>Spanish (IAL + CIE)</b>	Minimum grade C in Spanish Literature (preferably B) and minimum grade A/8 in Spanish Foreign Language (preferable A*/9)

Please see subject specific information on the following pages





## A Level English Literature

### Subject Summary

CIE A Level Literature in English will provide learners with the opportunity to gain further knowledge and understanding of international poetry, prose and drama, with candidates studying all genres at both levels. Learners will study a wide range of set texts that offer a depth and breadth of literary study and encourage lively and stimulating classroom discussion. At AS Level learners will study three set texts and prepare for one unseen text. At A Level they will study four further set texts. Throughout the AS and A Level course learners will be encouraged to practise their skills in close reading through the study of literary extracts and unseen texts; developing skills of analysis and interpretation of texts, alongside their expression of personal response to the texts studied. Learners will explore the conventions of genres of texts and the contexts in which works have been written, read and received.

The aims are to enable students to:

- enjoy the experience of reading literature
- develop an appreciation of and an informed personal response to literature in English in a range of texts in different forms, and from different periods and cultures
- communicate effectively, accurately and appropriately in written form
- develop the interdependent skills of reading, analysis and communication
- analyse and evaluate the methods writers use in creating meaning and effects
- encourage wider reading and an understanding of how it may contribute to personal development
- build a firm foundation for further study of literature

Component	Weighting	
	AS Level	A Level
<b>Paper 1: Drama and Poetry</b> 2 hour exam Respond to two questions	50%	25%
<b>Paper 2: Prose and Unseen</b> 2 hour exam Respond to two questions	50%	25%
<b>Paper 3: Shakespeare and Drama</b> 2 hour exam Respond to two questions	–	25%
<b>Paper 4: Poetry and Prose</b> 2 hour exam Respond to two questions	–	25%



## A Level Media Studies

### Subject Summary

CIE A Level Media Studies is recognised by universities and employers as proof of knowledge and understanding of the media and its role in our daily lives. Learners develop a set of transferable skills, including the skill of thinking critically about mediated information, understanding its rhetorical qualities, and being aware of the significance of its conditions of production and reception. Learners will also be able to practise this skill to communicate their own ideas in a variety of forms. These skills can be applied across a wide range of subjects and equip learners well for progression to higher education or directly into employment.

The aims are to enable students to:

- develop critical understanding of international media through engagement with media products and concepts
- develop critical understanding of international media through engagement with the creative application of practical skills
- explore production processes, technologies and contexts
- develop independence in research skills and their application
- enjoy and appreciate the media and its role in their daily lives
- appreciate and engage with a variety of global and local media texts
- explore the impact of the media within a variety of cultures and how this influences social values

It is strongly recommended that students taking this subject have a laptop that they can bring to school. The coursework unit is produced and submitted using digital technologies and it is essential that they can work on it both in class and at home. Students who wish to use a tablet can do so but it is important to be aware that the software and programs that we use are not intended for use on tablets. The design and lower processing power of tablets mean that many of the tools do not work or are difficult to use.

Component	Weighting	
	AS Level	A Level
<b>Component 1: Foundation Portfolio</b> Coursework - candidates produce part of their own magazine that includes digital evidence of the process of their work and a creative critical reflection.	50%	25%



<b>Component 2: Media Texts and Contexts</b> Two hour exam <ul style="list-style-type: none"><li>• Moving image analysis - representation and technical codes</li><li>• Film case studies - audiences and institutions</li></ul>	50%	25%
<b>Component 3: Advanced Portfolio</b> Coursework - Candidates produce a campaign of media products, digital evidence of the process of their work and reflect upon their finished products, in the form of an evaluative essay of around 1500 words. Candidates work either individually or as part of a group to complete this coursework.	–	25%
<b>Component 3: Media Debates</b> Two hour exam <ul style="list-style-type: none"><li>• Postmodern media</li><li>• Power and the Media</li><li>• Media Ecology</li></ul>	–	25%





## A Level Maths

### Subject summary:

Cambridge International AS & A Level Mathematics develops a set of transferable skills. These include the skill of working with mathematical information, as well as the ability to think logically and independently, consider accuracy, model situations mathematically, analyse results and reflect on findings. Learners can apply these skills across a wide range of subjects and the skills equip them well for progression to higher education or directly into employment.

The key concepts for Cambridge International AS & A Level Mathematics are:

- Problem solving Mathematics in Algebra, Geometrical techniques, Calculus, Mechanical models, Statistical methods and Probability.
- Communication of Mathematical proof and reasoning.
- Application of mathematical modelling in different real-world situations and problems, leading to predictions and solutions.

### Course overview:

Component	Weighting	
	AS level	A level
<b>Paper 1: Pure Mathematics 1</b> Topics studied - <ul style="list-style-type: none"><li>• Quadratics</li><li>• Functions</li><li>• Coordinate geometry</li><li>• Circular measure</li><li>• Trigonometry</li><li>• Series</li><li>• Differentiation</li><li>• Integration</li></ul>	60%	30%
<b>Paper 3: Pure Mathematics 3</b> Topics studied - <ul style="list-style-type: none"><li>• Algebra</li><li>• Logarithmic and exponential functions</li><li>• Trigonometry</li><li>• Differentiation</li><li>• Integration</li><li>• Numerical solution of equations</li><li>• Vectors</li><li>• Differential equations</li><li>• Complex numbers</li></ul>	-	30%
<b>Paper 4: Mechanics</b> Topics studied - <ul style="list-style-type: none"><li>• Forces and equilibrium</li><li>• Kinematics of motion in a straight line</li><li>• Momentum</li><li>• Newton's laws of motion</li><li>• Energy, work and power</li></ul>	40%  (Dependant on option block, only one of Mechanics or Statistics will be taken at AS the other at A)	20%



<b>Paper 5: Probability &amp; Statistics 1</b> Topics studied - <ul style="list-style-type: none"><li>• Representation of data</li><li>• Permutations and combinations</li><li>• Probability</li><li>• Discrete random variables</li><li>• The normal distribution</li></ul>	level)	20%
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## A Level Music

### Subject summary

The course provides a unique combination of academic study and creative opportunity. Students broaden their musical experience and interests, develop imagination and foster creativity. They recognise the interdependence of musical knowledge, understanding and skills, and make links between the integrated activities of performing, composing, and appraising underpinned by attentive listening. The course leads students on to higher education at both university and conservatoire level. It is a varied course and is a well-regarded and accepted A-Level into university and into the music industry.

### The course covers:

- the development of performing skills to demonstrate an understanding of musical elements, style, sense of continuity, interpretation, and expression.
- the development of composing skills to demonstrate the manipulation of musical ideas and the use of musical devices and conventions.
- the development of knowledge and understanding of a variety of instruments and styles, and of relevant approaches to both performing and composing.
- appraising contrasting genres, styles, and traditions of music, and develop understanding of musical contexts and a coherent awareness of musical chronology.

### Subject content and assessment

Component 1 - Performing	Weighting
	A Level
<ul style="list-style-type: none"><li>· A public performance for a minimum of 8 minutes of one or more pieces, performed as a recital.</li><li>· Performance can be playing or singing a solo, in an ensemble, improvising, or realising music using music technology.</li></ul>	30%
<b>Component 2 - Composing</b> <ul style="list-style-type: none"><li>· Total of two compositions.</li><li>· One composition must be from a list of briefs or a free composition and should be at least 4 minutes in duration.</li><li>· One composition must be from a list of briefs assessing compositional technique and must be at least 1 minute in duration.</li></ul>	30%



**Component 3 - Appraising - Exam 2 hours 10 minutes**

· Application of knowledge and understanding of musical elements, contents, and language through the context of six areas of study:

- **Vocal Music**  
J. S. Bach, Cantata · Ein Feste Burg, BWV 80  
Mozart, The Magic Flute · excerpts from Act I  
Vaughan Williams, On Wenlock Edge · Nos. 1, 3 and 5
- **Instrumental Music**  
Vivaldi, Concerto in D minor  
Clara Wieck-Schumann, Piano Trio in G minor  
Berlioz, Symphonie Fantastique · movement I
- **Music for Film**  
Danny Elfman, Batman Returns  
Rachel Portman, The Duchess  
Bernard Herrmann, Psycho
- **Popular and Jazz**  
Beatles, Revolver  
Courtney Pine, Back in the Day  
Kate Bush, Hounds of Love
- **Fusions**  
Debussy, Estampes  
Anoushka Shankar, Breathing Under Water  
Familia Valera Miranda, Caña Quema
- **New Directions**  
John Cage, Three Dances for Two Prepared Pianos · No. 1  
Kaija Saariaho, Petals for Violoncello and Live Electronics  
Stravinsky, The Rite of Spring

40%





## A Level Biology

### Subject summary

Biology AS and A level offers students a much deeper understanding of the living world around them from topics that include; Cells as the Unit of Life, Biochemical Processes, DNA, the molecule of hereditary, Natural Selection and Organisms and their Environment. This course provides students with the confidence to apply knowledge and skills in new situations and practise these skills with the practical element of the course. Cambridge International AS and A Level Biology helps learners develop the knowledge and skills that will prepare them for successful university study and beyond.

The key concepts for Cambridge International AS & A Level Biology are:

- **Cells as the units of life** - A cell is the basic unit of life, and all organisms are composed of one or more cells. There are two fundamental types of cells: prokaryotic and eukaryotic. Understanding how cells work provides an insight into the fundamental processes of all living organisms.
- **Biochemical processes** - Cells are dynamic structures within which the chemistry of life takes place. Biochemistry and molecular biology help to explain how and why cells function as they do.
- **DNA, the molecule of heredity** - Cells contain the molecule of heredity, DNA. DNA is essential for the continuity and evolution of life by allowing genetic information to be stored accurately, to be copied to daughter cells, to be passed from one generation to the next and for the controlled production of proteins. Rare errors in the accurate copying of DNA known as mutations result in genetic variation and are essential for evolution.
- **Natural selection** - Natural selection acts on genetic variation and is the major mechanism in evolution, including speciation. Natural selection results in the accumulation of beneficial genetic mutations within populations and explains how populations can adapt to meet the demands of changing environments.
- **Organisms in their environment** - All organisms interact with their biotic and abiotic environment. Studying these interactions allows biologists to better understand the effect of human activities on ecosystems, to develop more effective strategies to conserve biodiversity and to predict more accurately the future implications for humans of changes in the natural world.
- **Observation and experiment** - The different fields of biology are intertwined and cannot be studied in isolation. Observation, enquiry, experimentation and fieldwork are fundamental to biology, allowing relevant evidence to be collected and considered as a basis on which to build new models and theories. Such models and theories are further tested by experimentation and observation in a cyclical process of feedback and refinement, allowing the development of robust and evidence-based conceptual understandings.





Candidates for Cambridge International AS Level Biology study the following topics:

- 1 Cell structure
- 2 Biological molecules
- 3 Enzymes
- 4 Cell membranes and transport
- 5 The mitotic cell cycle
- 6 Nucleic acids and protein synthesis
- 7 Transport in plants
- 8 Transport in mammals
- 9 Gas exchange
- 10 Infectious diseases
  
- 11 Immunity

**AS Level candidates also study practical skills.**

Candidates for Cambridge International A Level Biology study the AS topics and the following topics:

- 12 Photosynthesis
- 13 Homeostasis
- 14 Control and coordination
- 15 Inheritance
- 16 Selection and evolution
- 17 Classification, biodiversity and conservation
- 18 Genetic technology

**A Level candidates also study practical skills.**



## Course overview

Component	Weighting	
	AS Level	A Level
<b>Paper 1</b> <b>Multiple Choice; Exam 1 hour 15 minutes</b> Topics studied: Questions are based on topics listed in Paper 2 section	31%	15.5%
<b>Paper 2</b> <b>As Level Structured Questions; Exam 1 hour 15 minutes</b> Topics studied: Cell Structure, Biological Molecules, Transport in Plants and Mammals, Amino Acids and Cell Replication amongst others	46%	23%
<b>Paper 3</b> <b>Advanced Practical Skills; Exam 2 hours</b> Practical Skills and structured questions	23%	11.5%
<b>Paper 4</b> <b>A Level structured questions; Exam 2 hours</b> Topics Include: Homeostasis, Coordination, Evolution and Selection and Genetic Technology amongst others.	–	38.5%
<b>Paper 5</b> <b>Planning, Analysis and Evaluation; Exam 1 hour 15 mins</b> Questions are based on the practical skills of planning, analysis and evaluation. The context of the questions may be outside the syllabus content		11.5%



## A Level Chemistry

### Subject summary

The aims describe the purposes of a course based on this syllabus. The aims are to enable students to study:

- Atoms and intermolecular forces  
Matter is built from atoms interacting and bonding through electrostatic forces. The structure of matter affects its physical and chemical properties and influences how substances react chemically.
- Experiments and evidence  
Chemists use evidence gained from observations and experiments to build models and theories of the structure and reactivity of materials. Theories are tested by further experiments and an appreciation of accuracy and reliability is gained.
- Patterns in chemical behaviour and reactions  
Patterns in chemical behaviour can be identified and used to predict the properties of substances. By applying these patterns, useful new substances can be designed, and synthetic routes created.
- Chemical bonds  
The understanding of how chemical bonds are made and broken by the movement of electrons allows us to predict patterns of reactivity. Appreciation of the strength of chemical bonds leads to the understanding of a material's properties and its uses.
- Energy changes  
The energy changes that take place during chemical reactions can be used to predict the extent, feasibility and rate of such reactions. An understanding is gained of why and how chemical reactions happen.

### Physical chemistry

- 1 Atomic structure
- 2 Atoms, molecules and stoichiometry
- 3 Chemical bonding
- 4 States of matter
- 5 Chemical energetics
- 6 Equilibria
- 7 Reaction kinetics

### Inorganic chemistry

- 8 The Periodic Table: chemical periodicity
- 9 Group 2
- 10 Group 17
- 11 Nitrogen and sulphur
- 12 Behaviour of acids and bases

### Organic chemistry

- 13 An introduction to AS Level organic chemistry
- 14 Hydrocarbons

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- 15 Halogen compounds
- 16 Hydroxy compounds
- 17 Carbonyl compounds
- 18 Carboxylic acids and derivatives
- 19 Nitrogen compounds
- 20 Polymerisation
- 21 Organic synthesis

**AS Level candidates also study practical skills.**

**Physical chemistry**

- 22 Chemical energetics
- 23 Electrochemistry
- 24 Equilibria
- 25 Reaction kinetics

**Inorganic chemistry**

- 26 Group 2
- 27 Chemistry of transition elements

**Organic chemistry**

- 28 An introduction to A Level organic chemistry
- 29 Hydrocarbons
- 30 Halogen compounds
- 31 Hydroxy compounds
- 32 Carboxylic acids and derivatives
- 33 Nitrogen compounds
- 34 Polymerisation
- 35 Organic synthesis

**Analysis**

- 36 Analytical techniques

**A Level candidates also study practical skills.**





## Course overview

Component	Weighting	
	AS Level	A Level
<b>Paper 1</b> <b>Multiple Choice 1 hour 15 minutes</b> 40 marks; 40 multiple-choice questions	31%	15.5%
<b>Paper 2</b> <b>AS Level Structured 1 hour 15 minutes</b> 60 marks; Structured questions	46%	23%
<b>Paper 3</b> <b>Advanced Practical Skills 2 hours</b> 40 marks; Practical work and structured questions	23%	11.5%
<b>Paper 4</b> <b>A Level Structured Questions 2 hours</b> 100 marks; Structured questions	-	38.5%
<b>Paper 5</b> <b>Planning, Analysis and 1 hour 15 minutes</b> 30 marks; Questions based on the experimental skills of planning, analysis and evaluation.	-	11.5%



## A Level Physics

### Subject summary

The key concepts for Cambridge International AS & A Level Physics are:

- **Models of physical systems**  
Physics is the science that seeks to understand the behaviour of the Universe. The development of models of physical systems is central to physics. Models simplify, explain and predict how physical systems behave.
- **Testing predictions against evidence**  
Physical models are usually based on prior observations, and their predictions are tested to check that they are consistent with the behaviour of the real world. This testing requires evidence, often obtained from experiments.
- **Mathematics as a language, and problem-solving tool**  
Mathematics is integral to physics, as it is the language that is used to express physical principles and models. It is also a tool to analyse theoretical models, solve quantitative problems and produce predictions.
- **Matter, energy and waves**  
Everything in the Universe comprises matter and/or energy. Waves are a key mechanism for the transfer of energy and are essential to many modern applications of physics.
- **Forces and fields**  
The way that matter and energy interact is through forces and fields. The behaviour of the Universe is governed by fundamental forces with different magnitudes that interact over different distances. Physics involves study of these interactions across distances ranging from the very small (quantum and particle physics) to the very large (astronomy and cosmology).

Candidates for Cambridge International AS Level Physics study the following topics:

- 1 Physical quantities and units
- 2 Kinematics
- 3 Dynamics
- 4 Forces, density and pressure
- 5 Work, energy and power
- 6 Deformation of solids
- 7 Waves
- 8 Superposition
- 9 Electricity
- 10 D.C. circuits
- 11 Particle physics

**AS Level candidates also study practical skills.**





Candidates for Cambridge International A Level Physics study the AS Level topics and the following topics:

- 12 Motion in a circle
- 13 Gravitational fields
- 14 Temperature
- 15 Ideal gases
- 16 Thermodynamics
- 17 Oscillations
- 18 Electric fields
- 19 Capacitance
- 20 Magnetic fields
- 21 Alternating currents
- 22 Quantum physics
- 23 Nuclear physics
- 24 Medical physics
- 25 Astronomy and cosmology

**A level candidates also study practical skills.**

### Course overview

Component	Weighting	
	AS Level	A Level
Paper 1	31%	15.5%
Paper 2	46%	23%
Paper 3	23%	11.5%
Paper 4	-	38.5%
Paper 5	-	11.5%



## A Level Geography

### Subject summary

Geography occupies a central position in understanding and interpreting issues affecting people, places and environments, and change in both space and time. Edexcel International AS and A Level Geography helps learners develop the knowledge and skills that will prepare them for many different types of careers. It combines well with both Arts and Science subjects, and is highly valued by universities.

The course covers

- an understanding of the principal processes operating within physical geography and human geography
- an understanding of the causes and effects of change on natural and human environments
- an awareness of the usefulness of geographical analysis to understand and solve contemporary human and environmental problems
- the ability to handle and evaluate different types and sources of information
- the skills to think logically, and to present an ordered and coherent argument in a variety of ways

### Course overview

Component	Weighting	
	AS Level	A Level
<b>Unit 1: Global Challenges</b> Written examination: 1 hour 45 minutes <b>Content overview:</b> Topic 1: World at Risk Topic 2: Going Global	60%	30%
<b>Unit 2: Geographical Investigations</b> Written examination: 1 hour 30 minutes <b>Content overview:</b> Topic 1: Crowded Coasts Topic 2: Urban Problems, Planning and Regeneration	40%	20%
<b>Unit 3: Contested Planet</b> Written examination: 2 hours <b>Content overview:</b> Topic A1: Atmosphere and Weather Systems Topic A2: Biodiversity Under Threat Topic B1: Energy Security <b>or</b> Topic B2: Water Conflicts Topic C1: Superpower Geographies <b>or</b> Topic C2: Bridging the Development Gap	–	30%
<b>Unit 4: Researching Geography</b> Written examination: 1 hour and 30 minutes <b>Content Overview:</b>	–	20%

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Option 1: Tectonic Activity and Hazards Option 2: Feeding the World's People Option 3: Cultural Diversity: People and Landscapes Option 4: Human Health and Disease		
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## A Level Travel and Tourism

### Subject summary

Travel and Tourism is the world's largest service industry and as such requires students with senior leadership aspirations to be trained for the industry. The A Level course recognises that despite the players in the market being susceptible to global influences, trends and disruption, the benefits of achieving a sustainable and economically viable Travel and Tourism Industry are of such enormity that potential stakeholders need more education and awareness on aspects such as:

- The scale of the travel and tourism industry.

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- Customer needs and wants.
- The importance of customer service.
- Market Research and Branding.
- The economic, sociocultural and environmental impacts of the Travel and Tourism industry.

50% of the final grade at AS is coursework. Students will have 5 months to plan, run and evaluate a tourism event in Valencia.

It is strongly recommended that students taking this subject have a laptop that they can bring to school. The coursework unit is produced and submitted using digital technologies and it is essential that they can work on it both in class and at home.

### Course overview

Component	Weighting	
	AS Level	A Level
<b>Paper 1</b> <b>Themes and Concepts; Exam 2 hours</b> The changing nature of travel and tourism Travel and tourism destinations Trends in travel and tourism Customer service in travel and tourism	50%	25%
<b>Coursework: Planning and Managing a Travel and Tourism Event; Coursework</b> Candidates work on a project which involves planning and managing a travel and tourism event. Candidates work in a team but present their project individually	50%	25%
<b>Paper 3</b> <b>Destination Marketing; Exam 1 hour 30 minutes</b> <b>Topics studied:</b> Market analysis research methodologies and tools analysis. Product positioning. Creating a brand identity. Key Performance Indicators	-	25%



<p><b>Paper 4</b> <b>Destination Management; Exam 1 hour 30 minutes</b> <b>Topics studied</b> Impacts of Tourism development Partnerships required in the industry. Destination management activities. The positive and negative economic impacts of tourism.</p>	-	25%
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## A Level History

### Subject summary

Cambridge International AS and A Level History aims to enable students to develop:

- an interest in the past and an appreciation of human endeavour
- a greater knowledge and understanding of historical periods or themes
- a greater awareness of historical concepts such as cause and consequence, change and continuity similarity and difference, significance and interpretations
- an appreciation of the nature and diversity of historical sources available, and the methods used by historians
- an exploration of a variety of approaches to different aspects of history and different interpretations of particular historical issues
- the ability to think independently and make informed judgements on issues

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- an empathy with people living in different places and at different times
- a firm foundation for further study of History.

### Course overview:

#### AS History European option: Modern Europe, 1750–1921

- France, 1774–1814
- The Industrial Revolution in Britain, 1750–1850
- Liberalism and nationalism in Germany, 1815–71
- The Russian Revolution, 1894–1921

#### A2 History: International history, 1945–92

- The origins and development of the Cold War
- US–Soviet relations during the Cold War, 1950–91
- The spread of communism in East and Southeast Asia, 1945–91
- Conflict in the Middle East, 1948–91

Component	Weighting	
	AS Level	A Level
<b>Paper 1</b> <b>Historical Enquiry</b> <b>Exam 1 hour 15 minutes</b>	40%	20%
<b>Paper 2</b> <b>Outline Study</b>	60%	30%
<b>Paper 3</b> <b>Historiography</b> <b>Exam 1 hour 15 minutes</b>	–	40%
<b>Paper 4</b> <b>Depth study</b> <b>Exam: 1 hour 45 minutes</b>	–	60%

### International A Level Business

#### Subject summary

International A Level Business reflects today's global world as students develop an understanding of current global issues that impact on business. Edexcel International Business prepares students for their next steps in today's global world by providing real business focus as students are encouraged to contextualise theory and respond to real-life international business case studies and stimulus material.

The course enables students to:

- develop a critical understanding of organisations and their ability to meet society's needs and wants
- understand that business behaviour can be studied from a range of perspective

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- generate enterprising and creative approaches to business opportunities, problems and issues
- be aware of the ethical dilemmas and responsibilities faced by organisations and individuals

### Course overview

Unit	Weighting	
	AS Level	A Level
<b>Unit 1 Marketing and People, Exam 2 hours</b> The Market Meeting Customer Needs The Marketing Mix and Strategy Managing People Entrepreneurs and Leaders	50%	25%
<b>Unit 2 Managing Business Activities, Exam 2 hours</b> Planning a business and raising finance Financial Planning Managing Finance Resource Management External influences	50%	25%
<b>Unit 3 Business Decisions and Strategy, Exam 2 hours</b> Business objectives and Strategy Business Growth Decision Making Techniques Influences on Business Decisions Assessing Competitiveness Managing Change	–	25%
<b>Unit 4 Global Business; Exam 2 hours</b> Globalisation Global Markets and Expansion Global Marketing Global Industries and companies	–	25%



## A Level Art

### Subject summary

The aims are to enable students to:

- develop an inquisitive, creative approach to research and problem-solving
- develop the ability to record from first-hand observation, personal experience and other sources
- effectively communicate their personal response by improving technical skills in a range of processes and media
- develop independent expression by analysing, evaluating and applying concepts and techniques
- articulate ideas and responses to their work and the work of others using a relevant vocabulary
- develop a clear contextual framework that aids critical reflection of their work
- develop a critical understanding of important concepts and formal elements of art and design
- develop the skills needed to study art and design at higher education.

### Course overview

Art Candidates may focus on one or combine several of the following: • painting • drawing • print making • mixed media • experimental – assemblage/construction.

Component	Weighting	
	AS Level	A Level
<b>Component 1</b> Candidates research, develop and realise a project from one area of study developing a theme of their choice There are two parts to the coursework: – a portfolio and – a final outcome	50%	25%
<b>Component 2</b> Candidates choose one starting point to develop into a personal response. There are two parts to the assignment: – supporting studies, created during the preparation period and – a final outcome, produced during a supervised test of 15 hours' total duration.	50%	25%
<b>Component 3</b> Candidates investigate a theme, idea, concept or process that is personal to them based pre released material  There are two parts to the investigation:  – practical work and  – written analysis (1000–1500 words).  The practical work and written analysis must form an integrated submission.	-	50%



## A Level Computer Science

### Subject summary

Computer Science A Level is a qualification designed for students who want to develop their understanding of computer science and its applications.

The course covers a wide range of topics, including programming, algorithms, data structures, computer hardware and software, computer networks, and database systems. It also includes

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practical skills such as programming in a high-level language and database design and implementation.

The aims of this course are to enable students to develop:

- computational thinking skills
- an understanding of the main principles of solving problems using computers
- an understanding of the component parts of computer systems and how they interrelate, including software, data, hardware, communication and people
- an understanding of the different methods of communication and the functionality of networks and the internet
- the skills necessary to apply this understanding to develop computer-based solutions to problems.

### Course overview

Component	Weighting	
	AS Level	A Level
<b>Paper 1</b> <b>Theory Fundamentals; Exam 1 hour 30 minutes</b> Topics studied: 1. Information representation 2. Communication 3. Computers and their components 4. Logic Gates and Logic Circuits 5. Processor Fundamentals 6. Assembly Language and Bit manipulation 7. System Software. OS and Language Translators 8. Security, privacy and data integrity 9. Ethics and Ownership 10. Databases	50%	25%
<b>Paper 2</b> <b>Fundamental problem-solving and programming skills</b> <b>Exam 2 hours</b> Topics studied: 11. Algorithm Design and Problem-Solving 12. Data Types and structures 13. Programming 14. Software Development	50%	25%





<p><b>Paper 3</b> <b>Advanced Theory; Exam 2 hours</b> Topics studied: 15. Data Representation 16. Communication and internet technologies 15. Hardware and Virtual Machines 18. Boolean Algebra and Logic Circuits 19. System Software. Purposes of an Operating System (OS) 20. Translation Software 21. Security 22. Artificial Intelligence (AI)</p>	–	25%
<p><b>Paper 4</b> <b>Practical; Exam 2 hour 30 minutes</b> Topics studied: 23. Algorithms 24. Recursion 25. Programming Paradigms 26. File Processing and Exception Handling</p>	–	25%





## SPANISH LANGUAGE & LITERATURE (CIE)

### Subject summary

The subject content is organised into six topic areas at A Level. These provide contexts for the acquisition of vocabulary and the study of grammar and structures. The study of these topic areas enables students to progress from the knowledge and skills developed at IGCSE or at AS Level.

- Culture
- Health and well-being
- Education and future plans
- Community and society
- Our responsibility for the planet
- Science and technology

At A Level, students will be expected to read authentic texts on familiar topics regularly encountered in work, school and leisure as well as some more abstract topics. Students will be required to demonstrate an understanding of ideas, emotions, opinions and attitudes, as well as distinguish between fact and opinion.

Students will develop skills in selecting and extracting relevant details and deducing the meaning of unknown words from context.

Students should have opportunities to develop their written skills and demonstrate their ability to use a wide range of structures and vocabulary accurately to communicate effectively. They should write about topics which are both familiar and more abstract, explain viewpoints on topical issues and give reasons and explanations for opinions. Students should be encouraged to develop a style of writing which can be used in creative writing tasks.

The A Level course includes a range of inspiring literature which has been carefully selected to offer a breadth and depth of literary study and to encourage lively and stimulating classroom discussion.

Throughout the study of literature, learners will be encouraged to develop skills in analysis and interpretation of texts and to give a personal response. Learners will explore the conventions of genres of texts and the contexts in which works have been written, read and received.



## Assessment overview

Candidates take all components in the same exam series.

Candidates will be eligible for grades A\*–E.

All A Level candidates take:

### Paper 1

Reading 1 hour 30 minutes  
40 marks c.33%

Candidates read a number of texts and answer multiple-choice and matching questions.  
Externally assessed

And:

### Paper 2

Writing 2 hours  
40 marks c.33%

Candidates complete two writing tasks: one argumentative/discursive task and one narrative or descriptive writing task.  
Externally assessed

And:

### Paper 3

Literature 2 hours  
40 marks c.33%

Candidates answer two questions, one question from each section:  
Section A passage-based questions  
Section B essay questions.  
Externally assessed

LITERARY TEXTS: “La casa de Bernarda Alba” by Federico García Lorca and “El coronel no tiene quien le escriba” by Gabriel García Márquez.

## INTERNATIONAL ADVANCED LEVEL (IAL) Spanish

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## Subject summary

Pearson Edexcel International Advanced Level in Spanish This qualification consists of four externally assessed units. The International Advanced Level consists of the two IAS units (Units 1 and 2) plus two IA2 units (Units 3 and 4). Students wishing to take the International Advanced Level must, therefore, complete all four units. The subject content is organised into six topic areas at A Level. These provide contexts for acquisition of vocabulary and the study of grammar and structures. The study of these topic areas enables students to progress from the knowledge and skills developed at IGCSE.

## Course overview

### Content and assessment overview

IAS	*Unit code: WSP01/01	
<b>Unit 1: Spoken expression and response</b>		
Externally assessed spoken examination: 8-10 minutes Availability: January and June. First assessment: June 2017 40 marks	30% of the total IAS	15% of the total IAL
<b>Content overview</b> <ul style="list-style-type: none"><li>Youth matters; Lifestyle, health and fitness; Environment and travel; Education and employment.</li></ul>		
<b>Assessment overview</b> <p><b>Section A: Spoken response</b> – Requires students to respond to four Pearson-set questions on a stimulus related to <b>one</b> of the student's <b>two</b> chosen general topic areas (GTAs).</p> <p><b>Section B: Discussion</b> – Requires the teacher/examiner to engage the student in a discussion that, although still relating to the same GTA and its linked topics, moves away from the main focus of the stimulus.</p> <p>Centres must record the responses and discussion for all students and submit the recording(s) electronically to Pearson (see Administrative support guide on our website for further guidance).</p>		



IAS	Unit code: WSP02/01	
<b>Unit 2: Understanding and written response</b>		
Externally assessed written examination: 2 hours and 30 minutes Availability: January and June. First assessment: June 2017 90 marks	70% of the total IAS	35% of the total IAL
<b>Content overview</b> <ul style="list-style-type: none"><li>Youth matters; Lifestyle, health and fitness; Environment and travel; Education and employment.</li></ul>		
<b>Assessment overview</b> <p><b>Section A: Listening</b> – Requires students to listen to a range of authentic material recorded in Spanish and to retrieve and convey information given in the recording by responding to a range of questions in Spanish.</p> <p><b>Section B: Reading and Grammar</b> – Requires students to read authentic printed materials in Spanish and to retrieve and convey information by responding to a range of questions in Spanish.</p> <p><b>Section C: Writing</b> – Requires students to write an email or article of a recommended length of 240–280 words in Spanish based on a short, printed stimulus written in Spanish and four related bullet points.</p>		

GENERAL TOPIC AREAS – UNIT 1 + 2	SUBTOPICS
YOUTH MATTERS	<ul style="list-style-type: none"><li>Family relationships and friendships</li><li>Peer pressure and role models</li><li>Music and fashion</li><li>Technology and communication</li></ul>
LIFESTYLE, HEALTH AND FITNESS	<ul style="list-style-type: none"><li>Food and diet</li><li>Sport and exercise</li><li>Health issues</li><li>Urban and rural life</li></ul>
ENVIRONMENT AND TRAVEL	<ul style="list-style-type: none"><li>Tourism, travel and transport</li><li>Natural disasters and weather</li><li>Climate change and its impact</li><li>Energy, pollution and recycling</li></ul>
EDUCATION AND EMPLOYMENT	<ul style="list-style-type: none"><li>Education systems and types of schooling</li><li>Pupil/student life</li><li>Volunteering and internships</li><li>Jobs and unemployment</li></ul>



IA2 Unit 3: Understanding and spoken response	Unit code: WSP03/01	
Externally assessed spoken examination: 11-13 minutes Availability: January and June. First assessment: January 2018 40 marks	30% of the total IA2	15% of the total IAL
<b>Content overview</b> <ul style="list-style-type: none"> <li>Debate on <b>any</b> issue chosen by the student followed by a discussion of at least two further issues chosen by the teacher/examiner from any of the IAL general topic areas (GTAs).</li> </ul>		
<b>Assessment overview</b> <p><b>Section A: Presentation and debate</b> – Requires students to demonstrate the effectiveness of their Spanish-language skills by presenting and taking a clear stance on any issue of their choice for about one minute. Students will then interact with the teacher/examiner as they defend and justify their views for up to four minutes.</p> <p><b>Section B: Discussion</b> – The teacher/examiner initiates a spontaneous discussion on at least two further issues, moving the conversation away from the students' chosen issue. If these further issues relate to the IAS GTAs, then they do not have to be rooted in Spanish-language culture. However, if these issues relate to the IA2 specific GTAs, they must be rooted in Spanish-language culture.</p> <p>Students will be expected to use debating skills and argument to discuss their chosen issue. They will be assessed on their reading and research skills in their chosen issue, as well as their communication skills and quality of spoken language.</p> <p>Centres must record the presentation and discussion for all students and submit the recording(s) electronically to Pearson (see Administrative support guide on our website for further guidance).</p>		

IA2 Unit 4: Research, understanding and written response	Unit code: WSP04/01	
Externally assessed written examination: 2 hours and 30 minutes Availability: January and June. First assessment: June 2018 90 marks	70% of the total IA2	35% of the total IAL
<b>Content overview</b> <ul style="list-style-type: none"> <li>Youth matters; Lifestyle, health and fitness; Environment and travel; Education and employment; Technology in the Spanish-speaking world; Society in the Spanish-speaking world; Ethics in the Spanish-speaking world.</li> <li>Set topics, literary texts and films.</li> </ul>		
<b>Assessment overview</b> <p><b>Section A: Listening</b> – Requires students to listen to a range of authentic material recorded in Spanish and to retrieve and convey information given in the recording by responding to a range of questions in Spanish.</p> <p><b>Section B: Reading and Grammar</b> – Requires students to read authentic printed materials in Spanish and to retrieve and convey information by responding to a range of questions in Spanish.</p> <p><b>Section C: Writing</b> – Requires students to answer one question, in Spanish, from a choice of two, that relates to a topic, a literary text or a film chosen from the prescribed list. Students should write 300-400 words. The assessment rewards students for communicating relevant information effectively as well as for the quality of the Spanish language produced.</p>		

GENERAL TOPIC AREAS – UNIT 3 + 4	SUBTOPICS
YOUTH MATTERS	<ul style="list-style-type: none"> <li>Family relationships and friendships</li> </ul>



	<ul style="list-style-type: none"><li>• Peer pressure and role models</li><li>• Music and fashion</li><li>• Technology and communication</li></ul>
LIFESTYLE, HEALTH AND FITNESS	<ul style="list-style-type: none"><li>• Food and diet</li><li>• Sport and exercise</li><li>• Health issues</li><li>• Urban and rural life</li></ul>
ENVIRONMENT AND TRAVEL	<ul style="list-style-type: none"><li>• Tourism, travel and transport</li><li>• Natural disasters and weather</li><li>• Climate change and its impact</li><li>• Energy, pollution and recycling</li></ul>
EDUCATION AND EMPLOYMENT	<ul style="list-style-type: none"><li>• Education systems and types of schooling</li><li>• Pupil/student life</li><li>• Volunteering and internships</li><li>• Jobs and unemployment</li></ul>
TECHNOLOGY IN THE SPANISH-SPEAKING WORLD	<ul style="list-style-type: none"><li>• Scientific advances</li><li>• Technological innovations</li><li>• Impact on life and environment</li></ul>
SOCIETY IN THE SPANISH-SPEAKING WORLD	<ul style="list-style-type: none"><li>• Migration</li><li>• Equality</li><li>• Politics</li><li>• Customs</li></ul>
ETHICS IN THE SPANISH-SPEAKING WORLD	<ul style="list-style-type: none"><li>• Beliefs</li><li>• Law and order</li><li>• Moral issues (e.g. euthanasia, adoption, genetic modification)</li></ul>

SET TOPIC BASED ON THE LITERARY TEXT: “Como agua para chocolate” by Laura Esquivel.



## A Level Italian

### Subject summary

We believe languages should appeal to all students. Edexcel Level 3 Advanced GCE in Italian has been developed to inspire all students who have an appreciation of the language, literature, film and culture of the Italian-speaking world.

Edexcel Italian A Level helps learners develop the knowledge and skills that will prepare them for successful university study. It will enable our students to develop advanced level knowledge for higher education and it will enhance their employability profile.

### This linear course covers

- four engaging themes – *Changes in Italian society; Political and artistic culture in Italian-speaking countries; Italy: an evolving society; From Fascism to the present day.*
- two works: one literary book (*Io non ho paura (I'm not scared)*, Niccolò Ammaniti) and one film (*La vita è bella (Life is beautiful)*, Roberto Benigni)
- content builds on the understanding developed at Key Stage 4 and gives students the opportunity to learn and apply important transferable skills in critical thinking and analysis.
- understanding of the Italian language, the culture of Italy and other Italian-speaking countries and communities, as well as practical and valuable language and transferable study skills.

### Course overview

Component	Weighting	
		A Level
<b>Paper 1: Listening, reading and translation - 2 hours</b> Section A: Listening Students will respond to comprehension questions based on a variety of contexts and sources. Section B: Reading A reading assessment based on a variety of text types and genres where students must respond to comprehension questions. Section C: Translation from Italian into English An unseen passage to be translated from Italian to English.	-	40%
<b>Paper 2: Written response to works and translation 2 hour 45 minutes</b> Section A: Translation from English into Italian Students translate an unseen passage from English into Italian. Section B: Written response to works Students select one question from a choice of two for each of the prescribed literary text(s). Section C: Written response to works Students must now write an extended response on one of the prescribed films.	-	30%





<p><b>Paper 3: Speaking (21 and 23 minutes, which includes 5 minutes' formal preparation time)</b></p> <p>Task 1 (discussion on a theme based on a stimulus containing two different statements).</p> <p>Task 2, Part 1 (independent research presentation) Students present a summary of at least two of the written sources.</p> <p>Task 2, Part 2 (discussion on independent research) Students answer questions on their presentation and then have a wider discussion on their research.</p>	–	30%





## International A Level French

### Subject summary

We believe languages should appeal to all students who have an appreciation of the language, history, film and culture of the French-speaking world. This Edexcel qualification will equip students with transferable skills such as autonomy, resourcefulness, creativity, critical and analytical thinking, and linguistic, cultural and cognitive flexibility that will enable them to develop advanced level knowledge for higher education and it will enhance their employability profile.

### This modular course covers

- engaging topics: Youth matters; Lifestyle, health and fitness; Environment and travel; Education and employment (AS) and Technology, Society and Ethics in the French-speaking world (A2)
- a wide variety of complex texts for different purposes on unfamiliar and familiar topics
- the ability to write clear, well-structured texts using an appropriate style, highlighting relevant salient issues, providing points of view with supporting arguments (where appropriate) and showing controlled use of organisational patterns, connectives and cohesive devices.
- the ability to express themselves fluently, spontaneously and appropriately in a range of speaking contexts with little obvious searching for expressions or use of avoidance strategies.
- the skills necessary for further study or employment, either in French-speaking countries or where French is used as the main medium of communication for business and commerce.
- the period during the Second World War when France was occupied by Nazi Germany. Students learn to analyse the historical period critically and write essays for Unit 4: Section C.

### Course overview

Component	Weighting	
	AS	A Level
<b>Unit 1: Spoken expression and response (8-10 min)</b> <b>Recorded, externally assessed</b> Section A: <b>Spoken response</b> – Requires students to respond to four Pearson-set questions on a stimulus related to one of the student's two chosen general topic areas (GTAs). Section B: <b>Discussion</b> – Requires the teacher/examiner to engage the student in a discussion.	30%	15%



<p><b>Unit 2: Understanding and written response - 2 hours 30 min</b></p> <p><b>Section A: Listening</b> – Requires students to listen to a range of authentic material and respond to a range of questions in French.</p> <p><b>Section B: Reading and Grammar</b> – Requires students to read authentic printed materials in French corresponding to a range of questions in French.</p> <p><b>Section C: Writing</b> – Requires students to write an email or article of a recommended length of 240–280 words in French based on a short, printed stimulus written in French and four related bullet points.</p>	70%	35%
<p><b>Unit 3: Understanding and spoken response (11-13 min)</b> <b>Recorded, externally assessed</b></p> <p><b>Section A: Presentation and debate</b> – Requires students to demonstrate the effectiveness of their French-language skills by presenting and taking a clear stance on any issue of their choice for about one minute. Students will then interact with the teacher/examiner as they defend and justify their views for up to four minutes.</p> <p><b>Section B: Discussion</b> – The teacher/examiner initiates a spontaneous discussion on at least two further issues. Students will be expected to use debating skills and argument to discuss their chosen issue. They will be assessed on their reading and research skills as well as their communication skills and quality of spoken language.</p>	30%	15%
<p><b>Unit 4: Research, understanding and written response (2 hours 30 min)</b></p> <p><b>Section A: Listening</b> – Requires students to listen to a range of authentic material and respond to a range of questions in French.</p> <p><b>Section B: Reading and Grammar</b> – Requires students to read authentic printed materials in French corresponding to a range of questions in French.</p> <p><b>Section C: Writing – Research-based essay</b>– Requires students to answer one question, in French, from a choice of two, that relates to a topic, a literary text or a film chosen from the prescribed list. Students should write 300-400 words.</p>	70%	35%



## A Level Physical Education

### Subject Summary

To give students the opportunity to gain an AS qualification, in Y12 students will carry out the AS only option offered with Cambridge International Examinations.

#### Component 1

Theory 1 hour 45 minutes  
70 marks  
Structured questions  
Externally assessed  
50% of the AS Level

#### Component 2

Coursework  
70 marks  
Candidates choose **two** physical activities from the list in the syllabus (35 marks for each physical activity).  
Internally assessed and externally moderated  
50% of the AS Level

For Component 1 the following topics are studied

- 1 Joints, movements and muscles
- 2 Biomechanics
- 3 The cardiovascular system
- 4 The respiratory system
- 5 Skill and ability
- 6 Theories of learning
- 7 Information processing
- 8 Practice and learning
- 9 Sociocultural issues
- 10 Ethics and deviance
- 11 Commercialisation and the media
- 12 The use of technology

For Component 2 the following activities are available for students



- Association football
- Badminton
- Basketball
- Competitive swimming
- Cricket
- Cross-country running
- Field hockey
- Goalball
- Netball
- Olympic weightlifting
- Rugby union
- Squash
- Table tennis
- Tennis
- Track and field athletics
- Volleyball

Following the completion of the AS qualification, students are given the option to continue working towards as full A-Level with Edexcel. This qualification allows for a wider range of options for the practical element.

### Y13 Course Overview

Component	Weighting
<b>Component One: Scientific Principles</b> <ul style="list-style-type: none"><li>• Topic 1: Applied anatomy and physiology</li><li>• Topic 2: Exercise physiology and applied movement analysis</li></ul> Examination at the end of Yr13: 2hr30	40%
<b>Component Two: Psychological and Social Principles of Physical Education</b> <ul style="list-style-type: none"><li>• Topic 3: Skill acquisition</li><li>• Topic 4: Sport psychology</li><li>• Topic 5: Sport and society</li></ul> Examination at the end of Yr13: 2hr	30%



<p><b>Component Three: Practical Performance</b></p> <ul style="list-style-type: none"><li>• Skills performed in one physical activity as a player/performer</li></ul> <p>OR</p> <ul style="list-style-type: none"><li>• Skills performed in one physical activity as a coach</li></ul> <p>Filmed evidence collected throughout the course</p>	15%
<p><b>Component Four: Performance Analysis and Performance Development Programme</b></p> <ul style="list-style-type: none"><li>• In the role of player/performer or coach analyse two components of a physical activity (one physiological component and either a tactical or technical component).</li><li>• In the role of player/performer or coach analyse, implement and evaluate a Performance Development Programme.</li></ul> <p>Written coursework written throughout the course</p>	15%



## Pearson BTEC International Level 3 Extended Diploma Qualifications

### Purpose

The Pearson BTEC International Level 3 qualifications are career-focused, designed to enable learners to gain the knowledge and skills required for employment, or to be taken as part of a wider study programme or apprenticeship.

They have been designed for international learners, and have therefore been developed in collaboration with employers, HE Institutions and teaching professionals from around the world. This is reflected in the depth and breadth of the content, and the design of the assessment. They are designed to enable the combination of theory and practice in teaching and learning which is then assessed through a combination of written and practical tasks set in work-related contexts.

They are designed for learners aged 16+ intending to progress into higher education, higher applied courses or direct to employment.

### Assessment

Pearson BTEC International Level 3 qualifications are 100% internally assessed through written assignments and practical tasks. Most assessments are set and marked by educators in the school or college and verified by Pearson. Pearson will set and provide centres with assignments for some mandatory units (approximately 25% of all units).

This means that all assessments can be arranged at a time that best accommodates the academic year. This style of assessment gives learners the opportunity to build up a portfolio of evidence which demonstrates how they can apply their knowledge, skills and achievements in real-life scenarios.

BTEC assessments typically include a mix of coursework and practical assessments, with no examinations. This mix allows students to demonstrate their skills and knowledge acquired through a variety of evidence types, accommodating different learning styles and abilities.



## Pearson BTEC International Level 3 Extended Diploma in Business

### Mandatory units

There are six mandatory units, three internal units and three set assignment units. Learners must complete and achieve a Pass or above in all mandatory units.

### Optional units

Learners must complete at least nine optional units totalling at least 540 GLH

	<b>Semester 1</b>	<b>Semester 1</b>	<b>Semester 1</b>	<b>Semester 1</b>
<b>Business Int. Level 3 Extended Diploma</b>  Year 1 <b>1080 GL</b>	U1 Exploring Business  Mandatory 90 GL	U7 Business Decision Making  Mandatory Set Assignment 120 GL	U9 Team Building in Business  Optional 60 GL	U3 Business Finance  Mandatory 90 GL
	<b>Semester 2</b>	<b>Semester 2</b>	<b>Semester 2</b>	<b>Semester 2</b>
	U21 Training and Development  Optional 60 GL	U7 Business Decision Making  Mandatory Set Assignment (120 GL)	U20 Business Ethics  Optional 60 GL	U2 Research & Plan a Marketing Campaign  Mandatory Set Assignment 90 GL
	<b>Semester 3</b>	<b>Semester 3</b>	<b>Semester 3</b>	<b>Semester 3</b>
<b>Business Int. Level 3 Extended Diploma</b>  Year 2 <b>1080 GL</b>	U8 Human Resources  Optional 60GL	U19 Pitching for a New Business  Optional 60GL	U6 Principles of Management  Mandatory Set Assignment 60GL	U24 Branding  Optional 60GL
	<b>Semester 4</b>	<b>Semester 4</b>	<b>Semester 4</b>	<b>Semester 4</b>
	U4 Managing an Event  Mandatory 90GL	U18 Creative Promotion  Optional 60GL	U30 Career Planning  Optional 60GL	U14 Investigating Customer Service  Optional 60GL

## Pearson BTEC International Level 3

### Extended Diploma in Sport, Business and Management

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### Mandatory units

There are eight mandatory units. Learners must complete and achieve a Pass or above in all mandatory units.

### Optional units

Learners must complete optional units totalling at least 480 Guided Learning Hours (GLH)

<b>Sport, Business &amp; Management Int. Level 3 Diploma</b>  Year 1 <b>720 GL</b>	<b>Semester 1</b>	<b>Semester 1</b>	<b>Semester 1</b>	<b>Semester 1</b>	
	U12 Sports Tourism  Mandatory 60 GL	U11 Business in Sport  Mandatory 60 GL	U4 Ethics, Behaviours & Values  Mandatory 60 GL	U13 Sports Journalism  Mandatory 60 GL	
	<b>Semester 2</b>	<b>Semester 2</b>	<b>Semester 2</b>	<b>Semester 2</b>	<b>Semester 2</b>
	U26 Nutrition for Physical Performance  Optional 60 GL	U27 Sports Psychology  Optional 60 GL	U2 Careers in the Sport & Active Leisure Ind.  Mandatory 90 GL	U14 Marketing Communications  Mandatory 60 GL	U21 History of Liverpool Football Club  Optional 30GL

<b>Sport, Business &amp; Management Int. Level 3 Diploma</b>  Year 2 <b>720 GL</b>	<b>Semester 3</b>	<b>Semester 3</b>	<b>Semester 3</b>	<b>Semester 3</b>	
	U3 Research Project in Sport  Mandatory Set Assignment 120GL	U39 Enterprise and Entrepreneurs  Optional 90 GL	U32 Sports Performance Analysis  Optional 60 GL	U1 Health, Wellbeing & Sport  Mandatory Set Assignment 90 GL	
	<b>Semester 4</b>	<b>Semester 4</b>	<b>Semester 4</b>	<b>Semester 4</b>	
	U3 Research Project in Sport  Mandatory Set Assignment 120GL	U28 Fitness Testing  Optional 60 GL	U30 Organising Events in Sport & Physical Activities  Optional 60 GL	U5 Self-Employment in Sport & Physical Activity  Optional 60 GL	



## **ASIGNATURAS DE SELECTIVO ESPAÑOL PCE (Prueba de competencia específica)**

### **BIOLOGÍA**

#### **BLOQUE I**

- TEMA 1. La base molecular y físico-química de la vida.
- TEMA 2. Glúcidos.
- TEMA 3. Lípidos.
- TEMA 4. Proteínas, enzimas y vitaminas.
- TEMA 5. Ácidos nucleicos.

#### **BLOQUE II**

- TEMA 6. La célula.
- TEMA 7. La membrana plasmática.
- TEMA 8. Orgánulos membranosos.
- TEMA 9. Metabolismo celular.
- TEMA 10. Catabolismo.
- TEMA 11. Anabolismo.
- TEMA 12. La reproducción celular.

#### **BLOQUE III**

- TEMA 13. Las leyes de la herencia.
- TEMA 14. El DNA, portador del mensaje genético.
- TEMA 15. Mutaciones.
- TEMA 16. La evolución.

#### **BLOQUE IV**

- TEMA 17. Microorganismos.
- TEMA 18. Microorganismos, enfermedades y aplicaciones.

#### **BLOQUE V**

- TEMA 19. Inmunología.
- TEMA 20. Anomalías del sistema inmunitario.



## DIBUJO TÉCNICO

### BLOQUE I. GEOMETRÍA Y DIBUJO TÉCNICO

#### I.1. RESOLUCIÓN DE PROBLEMAS GEOMÉTRICOS:

- I.1.1 - Proporcionalidad.
- I.1.2 - El rectángulo áureo. Aplicaciones.
- I.1.3 - Construcción de figuras planas equivalentes.
- I.1.4 - Relación entre los ángulos y la circunferencia.

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- I.1.5 - Arco capaz. Aplicaciones.
- I.1.6 - Potencia de un punto respecto a una circunferencia.
- I.1.7 - Determinación y propiedades del eje radical y del centro radical.
- I.1.8 - Aplicación a la resolución de tangencias.
- I.1.9 - Inversión. Determinación de figuras inversas. Aplicación a la resolución de tangencias.

### **TRAZADO DE CURVAS CÓNICAS Y TÉCNICAS:**

- I.2.1 - Curvas cónicas. Origen, determinación y trazado de la elipse, la parábola y la hipérbola.
- I.2.2 - Resolución de problemas de pertenencia, tangencia e incidencia. Aplicaciones.
- I.2.3 - Curvas técnicas. Origen, determinación y trazado de las curvas cíclicas y evolventes. Aplicaciones.

### **I.3. TRANSFORMACIONES GEOMÉTRICAS:**

- I.3.1 - Afinidad. Determinación de sus elementos.
- I.3.2 - Trazado de figuras afines
- I.3.3 - Construcción de la elipse afín a una circunferencia. Aplicaciones.
- I.3.3 - Homología. Determinación de sus elementos. Trazado de figuras homólogas. Aplicaciones.

## **BLOQUE II. SISTEMAS DE REPRESENTACIÓN**

### **II.1 PUNTO, RECTA Y PLANO EN SISTEMA DIÉDRICO:**

- II.1.1 - Resolución de problemas de pertenencia, incidencia, paralelismo y perpendicularidad.
- II.1.2 - Determinación de la verdadera magnitud de segmentos y formas planas.
- II.1.3 - Abatimiento de planos. Determinación de sus elementos. Aplicaciones.
- II.1.4 - Giro de un cuerpo geométrico. Aplicaciones.
- II.1.5 - Cambios de plano. Determinación de las nuevas proyecciones. Aplicaciones.

### **II.2 CONSTRUCCIÓN DE FIGURAS PLANAS:**

- II.2.1 - Afinidad entre proyecciones. Problema inverso al abatimiento.
- II.2.2 - CUERPOS GEOMÉTRICOS EN SISTEMA DIÉDRICO:
  - II.2.2.1 - Representación de poliedros regulares. Posiciones singulares.
  - II.2.2.2 - Determinación de sus secciones principales. Representación de prismas y pirámides. Determinación de secciones planas y elaboración de desarrollos.
  - II.2.2.3 - Intersecciones. Representación de cilindros, conos y esferas. Secciones planas.

### **II.2.3 - SISTEMAS AXONOMÉTRICOS ORTOGONALES:**

- II.2.3.1 - Posición del triedro fundamental.
- II.2.3.2 - Relación entre el triángulo de trazas y los ejes del sistema.
- II.2.3.3 - Determinación de coeficientes de reducción.
- II.2.3.4 - Tipología de las axonometrías ortogonales.
- II.2.4 - Representación de figuras planas. Ventajas e inconvenientes.
- II.2.5 - Representación simplificada de la circunferencia.
- II.2.6 - Representación de cuerpos geométricos y espacios arquitectónicos.
- II.2.7 - Secciones planas. Intersecciones.

## **BLOQUE III. DOCUMENTACIÓN GRÁFICA DE PROYECTOS**

### **III. ELABORACIÓN DE BOCETOS, CROQUIS Y PLANOS.**

#### **III.1 EL PROCESO DE DISEÑO/FABRICACIÓN:**

- III.1.1 – Perspectiva histórica y situación actual.

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III.2.2 – El proyecto: tipos y elementos. Planificación de proyectos.

III.2.3 – Identificación de las fases de un proyecto. Programación de tareas. Elaboración de las primeras ideas. Dibujo de bocetos a mano alzada y esquemas. Elaboración de dibujos cotados. Elaboración de croquis de piezas y conjuntos.

III.2 - Tipos de planos. Planos de situación, de conjunto, de montaje, de instalación, de detalle, de fabricación o de construcción.

III.3 - Presentación de proyectos. Elaboración de la documentación gráfica de un proyecto gráfico, industrial o arquitectónico sencillo.

II.2.4.1 - Posibilidades de las Tecnologías de la Información y la Comunicación aplicadas al diseño, edición, archivo y presentación de proyectos.

### **III.4 - DIBUJO VECTORIAL 2D.**

III.4.1 - Dibujo y edición de entidades.

III.4.2 - Creación de bloques.

III.4.3 - Visibilidad de capas.

### **III.5 - DIBUJO VECTORIAL 3D.**

III.5.1 - Inserción y edición de sólidos.

III.5.2 - Galerías y bibliotecas de modelos.

III.5.3 - Incorporación de texturas.

III.5.4 - Selección del encuadre, la iluminación y el punto de vista.

## **EMPRESAY DISEÑO DE MODELOS DE NEGOCIOS**

### **Tema 1: El papel de la empresa en la economía**

- 1- Visión panorámica de la economía
- 2- Funciones de la empresa
- 3- Áreas funcionales, componentes y objetivos
- 4- El empresario y sus perfiles
- 5- La importancia del emprendimiento en la sociedad
- 6- Mujer y emprendimiento

### **Tema 2: Clases de empresa y formas de emprendimiento**

- 1- Clasificación de las empresas
- 2- Las empresas, según su forma jurídica
- 3- El empresario individual
- 4- La sociedad de responsabilidad limitada
- 5- La sociedad anónima
- 6- Las empresas de economía social
- 7- Formas de emprender. El emprendimiento social
- 8- Marco jurídico de la actividad empresarial

### **Tema 3: Entorno, estrategia y desarrollo empresarial**

- 1- El entorno de la empresa

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- 2- La estrategia competitiva de la empresa
- 3- Análisis estratégico: método DAFO
- 4- Decisiones de localización, dimensión y crecimiento
- 5- Formas de crecimiento empresarial
- 6- Crecimiento externo
- 7- Las pymes en la economía
- 8- Responsabilidad social y medioambiental

#### **Tema 4: Generación de modelos de negocio**

- 1- Tendencias emergentes y cambios económicoa
- 2- El modelo Canvas
- 3- Ideas y patrones de modelos de negocios
- 4- Creatividad y modelos de negocios
- 5- Convergencia y divergencia
- 6- Organización de ideas y pensamiento visual
- 7- Presentación de proyectos y de ideas

#### **Tema 5: La función productiva de la empresa**

- 1- Área de producción de la empresa
- 2- Producción y eficiencia
- 3- Costes, ingresos y beneficios de la empresa
- 4- Componentes y estructura de costes
- 5- Umbral de rentabilidad
- 6- ¿Producir o comprar?

#### **Tema 6: Productividad, eficiencia e innovación**

- 1- La productividad como indicador de la eficiencia
- 2- Crecimiento de la productividad e I+D+i
- 3- Teorías, tipos y estrategias de innovación
- 4- Inventarios
- 5- Modelos de gestión de inventarios
- 6- Nuevos sistemas de gestión de inventarios
- 7- Valoración de inventarios
- 8- Costes sociales y economía circular

#### **Tema 7: La función comercial de la empresa**

- 1- Actividad comercial y su evolución
- 2- El proceso de planificación de marketing
- 3- La empresa y los tipos de mercado
- 4- Investigación de mercados
- 5- Segmentación de mercados
- 6- Estrategias de marketing y posicionamiento
- 7- Marketing y ética empresarial

#### **Tema 8: Los instrumentos del marketing mix**

- 1- El marketing mix
- 2- La política del producto
- 3- La marca y el ciclo de vida del producto



- 4- Los atributos y la marca personal del emprendedor
- 5- La política de precios
- 6- La distribución comercial

#### **Tema 9: La financiación de la empresa**

- 1- La función financiera de la empresa
- 2- Las fuentes de financiación
- 3- La constitución y las ampliaciones de capital
- 4- Financiación interna o autofinanciación
- 5- Financiación ajena a corto, medio y largo plazo
- 6- Fuentes alternativas de financiación

#### **Tema 10: Las inversiones de la empresa**

- 1- Las decisiones de inversión
- 2- Equivalencia de capitales
- 3- Valoración y selección de inversiones
- 4- Criterios dinámicos de selección de inversiones
- 5- Criterios estáticos de selección de inversiones
- 6- Las amortizaciones de las inversiones

#### **Tema 11: El patrimonio y las cuentas de la empresa**

- 1- El patrimonio de la empresa
- 2- Criterios de clasificación del patrimonio
- 3- El balance de situación
- 4- La cuenta de resultados o pérdidas y ganancias

#### **Tema 12: Análisis económico y financiero de la empresa**

- 1- Análisis de balances
- 2- El fondo de maniobra
- 3- Análisis financiero de balance
- 4- Posibles situaciones financieras
- 5- Análisis económico de la empresa
- 6- Rentabilidad y estructura financiera de la empresa

#### **Tema 13: Análisis y valoración de modelos de negocio: Lean startup**

- 1- Entorno del modelo de negocio y análisis de la competencia
- 2- Modelo de negocio: lean startup
- 3- Del modelo de negocio al plan de empresa

#### **Tema 14: Dirección y organización de la empresa**

- 1- La dirección de la empresa y sus funciones
- 2- La función de planificación
- 3- La función de control
- 4- La función de organización
- 5- La departamentalización de la empresa
- 6- Organización formal e informal

#### **Tema 15: La dirección de recursos humanos**



- 1- La gestión de recursos humanos
- 2- La motivación humana
- 3- Dirección, liderazgo y comunicación
- 4- Habilidades que demanda el mercado de trabajo
- 5- Reclutamiento, selección y formación de personal
- 6- Contrato de trabajo y relaciones laborales

## FÍSICA

### YEAR 12

#### - Tema 0: Introducción a la actividad científica.

- Repaso de contenidos de cálculo de vectores, cinemática y dinámica
- Uso de la calculadora y expresión de resultados en notación científica.
- Concepto de sistema de referencia. Elaboración de gráficas para dos y tres variables.

#### - Tema 1: Interacción gravitatoria.

- Orígenes del estudio orbital y de los cuerpos celestes (Teorías geocéntricas, Copérnico, Galileo, etc.)
- Relación de movimientos orbitales y Leyes de Kepler.
- Ley de Gravitación Universal. Concepto de Campo, Líneas de campo, Intensidad de campo gravitatorio, campo conservativo, superficie equipotencial y principio de superposición.
- Aspectos energéticos de los movimientos orbitales. Concepto de Energía mecánica, potencial y cinética. Velocidad y Energía de escape. Concepto de trabajo y potencial gravitatorio.
- Materia Oscura, tipos de satélites y caos determinista.

#### - Tema 2: Campo eléctrico.

- Relación de conceptos de campo aplicados a cargas puntuales en el espacio. Ley de Coulomb, Intensidad de Campo eléctrico y Carga Eléctrica.
- Carácter conservativo del campo eléctrico. Similitudes y diferencias con el campo gravitatorio.
- Ley de Gauss para Campo Eléctrico. Concepto de Flujo.





### - Tema 3: Movimiento Armónico Simple y Ondas.

- Ecuaciones de Onda. Magnitudes asociadas a las ondas. Ondas armónicas, longitudinales y transversales.
- Principios energéticos aplicados a las ondas. Principio de Huygens, Ley de Snell, Interferencia, Reflexión y Difracción.
- Estudio del sonido. Efecto Doppler. Intensidad sonora y efectos de resonancia en la vida cotidiana. Tecnologías asociadas al sonido.
- Espectro electromagnético. Radiación electromagnética.

### - Tema 4: Óptica Geométrica.

- Ley de Snell. Ángulo crítico, Fenómeno de reflexión total e Índice de refracción.
- Sistemas ópticos: Lentes y Espejos. Leyes de las lentes delgadas. Ecuaciones asociadas a cada sistema y formación e interpretación de imágenes.
- El Ojo Humano. Defectos en la visión y correcciones.

## YEAR 13

### Tema 5: Interacciones electromagnéticas. Inducción electromagnética.

- Campo magnético, fenómenos asociados y relación con el campo eléctrico.
- Estudio de cargas puntuales en movimiento en presencia de un campo magnético. Ley de Lorentz. Regla de la mano derecha.
- Generación de un campo magnético a través de una corriente eléctrica en conductores rectilíneos, espiras, solenoides y toroides. Ley de Ampère y Ley de Biot-Savart.
- Fenómeno de Inducción electromagnética. Experiencia de Faraday-Henry. Ley de Faraday y Ley de Lenz. Generadores.

### Tema 6: Introducción a la Física del siglo XX. Física Cuántica y Relativista.

- Teoría Especial de la Relatividad. Dilatación temporal y contracción espacial a velocidades cercanas a la luz.
- Experimento de Michelson-Morley.
- Insuficiencia de la Física Clásica para explicar ciertos fenómenos. Hipótesis de Planck, energía de un fotón con respecto de su frecuencia o longitud de onda. Einstein y el efecto fotoeléctrico.
- Cuantización de la energía y relación con los modelos atómicos (Bohr).
- Dualidad onda-corpúsculo. Carácter probabilístico de la mecánica cuántica (Heisenberg y De Broglie).



### **Tema 7: Introducción a la Física Nuclear.**

- Tipos de radiación. Láseres, funcionamiento, tipos y aplicaciones.
- Relación entre composición y masa nucleares, isótopos. Periodo de emidesintegración.
- Fisión y Fusión Nuclear. Aplicaciones de dichos fenómenos.
- Distinción entre las cuatro interacciones de la naturaleza y sus procesos. Unificación de las interacciones fundamentales.
- Partículas elementales y composición de la materia. Origen del universo y cronología del Big Bang.
- Fronteras de la física actual



## FUNDAMENTOS ARTÍSTICOS

### BLOQUE I El Romanticismo.

1. Contexto histórico.
2. Características y Goya
3. Artes decorativas: Regency Style y Segundo Imperio.
4. La música: De la Clásica a la Romántica y Beethoven.
5. El Teatro en Alemania, Francia y España.

### BLOQUE II Del Realismo al Impresionismo.

1. Contexto histórico.
2. Arquitectura: del Hierro y Chicago.
3. Escultura.
4. Pintura: Realismo, Impresionismo, Postimpresionismo, Pintura académica y movimiento Simbolista.
5. Música: impresionista y la zarzuela.

### BLOQUE III El Modernismo del Art Nouveau francés al Modernismo catalán.

1. Contexto histórico.
2. El Modernismo.
3. La música.
4. El mueble: Art Nouveau, Modernismo en Cataluña y Austria y el Sezessionstil.
5. La moda y el japonismo, la joyería y el cartel.

### BLOQUE IV Las primeras Vanguardias I.

1. Contexto histórico.
2. La arquitectura: Funcionalismo, Organicismo y Arquitectura de vanguardia.
3. Fauvismo, Expresionismo, Cubismo, Futurismo, Dadaísmo, Arte Abstracto, Surrealismo y Escuela de París.
4. Picasso y Dalí.
5. El Racionalismo.
6. La Bauhaus y el inicio del arte moderno.

### BLOQUE V. Las primeras vanguardias II

1. La música: el Jazz.



2. El teatro constructivista, político y la danza.
3. Joyería y moda.

#### **BLOQUE VI. Arte de la segunda mitad del SXX I**

1. Referentes históricos, localización y características.
2. Del Funcionalismo a la arquitectura de autor.
3. Segundas Vanguardias: informalismo, Expresionismo abstracto, Pop Art, Nuevo Realismo Francés, Abstracción prospectórica y Minimalismo, arte acción y arte conceptual, Arte cinético, Arte Povera, Hiperrealismo, Individualidades artísticas y otras tendencias a partir de 1980.
4. Escultura.
5. Diseño industrial.

#### **BLOQUE VII. Arte de la segunda mitad del SXX II**

1. La música: Pop, Rock y Folk.
2. Teatro y danza.
3. La moda: Top models y desfiles.
4. La fotografía.
5. El cine: estadounidense, europeo, Japón, Brasil y cine de animación.
6. Nacimiento y auge de la TV.
7. El Cómic.

#### **BLOQUE VIII: El hecho artístico del S XXI**

1. Referentes históricos, localización y características.
2. La interdisciplinariedad creativa: Arte digital, Arte robótico y Bioarte.
3. Arte de compromiso social: activista y ecologista.
4. Últimas tendencias arquitectónicas: Museos y fundaciones.
5. La Fotografía: nuevas tecnologías, en el arte y con la ecología.
6. El cine y la tv digital.



## GEOGRAFIA

### **BLOQUE I Naturaleza y Medio Ambiente en el territorio español.**

1. El relieve.
2. El clima.
3. La hidrografía
4. La vegetación.
5. Paisajes naturales.

### **BLOQUE II La población y los espacios urbanos en España**

1. La población.
2. La ciudad y los espacios urbanos.

### **BLOQUE III Las actividades económicas en España.**

1. Los espacios rurales y el sector primario.
2. El sector secundario.
3. El sector terciario.

### **BLOQUE IV Organización territorial en España**

1. Organización territorial de España.

## HISTORIA DEL ARTE



**BLOQUE I Arte clásico: Grecia y Roma.**

1. El arte Griego
2. El arte Romano
3. El arte Romano en Hispania.

**BLOQUE II La Edad Media.**

1. Arte Paleocristiano y Bizantino.
2. Arte Hispanomusulmán.
3. Arte Románico.
4. Arte Gótico.

**BLOQUE II La edad del humanismo. El Renacimiento.**

1. Renacimiento Italiano el Quattrocento.
2. Renacimiento Italiano el Cinquecento.
3. Miguel Ángel.
4. Renacimiento Europeo.
5. Renacimiento en España.

**BLOQUE IV El Barroco y el Neoclasicismo.**

1. Arte Barroco en Italia.
2. Arte Barroco en Europa.
3. Arte Barroco en España.
4. Neoclasicismo.

**BLOQUE V Arte Contemporáneo**

1. Arte del S.XIX
2. Arte del S.XX

**MATEMÁTICAS APLICADAS**

**ÁLGEBRA**

1.- Matrices

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2.- Sistemas de inecuaciones lineales  
3.- Programación lineal

### **ANÁLISIS MATEMÁTICO = CÁLCULO**

1.- Límites, continuidad y asíntotas

2.- Derivadas

3.- Aplicaciones a las derivadas

4.- Integrales

### **PROBABILIDAD**

1.- Probabilidad de sucesos

- Leyes de Morgan

2.- Probabilidad condicionada

3.- Sucesos independientes

4.- Teorema de Bayes

5.- Probabilidad total

### **ESTADÍSTICA**

1.- Distribuciones muestrales

2.- Intervalos de confianza

## **MATEMÁTICAS II**

### **BLOQUE I. PROCESOS, MÉTODOS Y ACTITUDES EN MATEMÁTICAS**

I.1 - Planificación del proceso de resolución de problemas.

I.2 - Estrategias y procedimientos puestos en práctica: relación con otros problemas conocidos, modificación de variables, suponer el problema resuelto.

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I.3 - Soluciones y/o resultados obtenidos: coherencia de las soluciones con la situación, revisión sistemática del proceso, otras formas de resolución, problemas parecidos, generalizaciones y particularizaciones interesantes.

I.4 - Iniciación a la demostración en matemáticas: métodos, razonamientos, lenguajes, etc.

I.5 - Métodos de demostración: reducción al absurdo, método de inducción, contraejemplos, razonamientos encadenados, etc.

I.6 - Razonamiento deductivo e inductivo.

I.7 - Lenguaje gráfico, algebraico, otras formas de representación de argumentos.

I.8 - Elaboración y presentación oral y/o escrita de informes científicos sobre el proceso seguido en la resolución de un problema o en la demostración de un resultado matemático.

I.9 - Realización de investigaciones matemáticas a partir de contextos de la realidad o contextos del mundo de las matemáticas.

I.10 - Elaboración y presentación de un informe científico sobre el proceso, resultados y conclusiones del proceso de investigación desarrollado.

I.11 - Práctica de los procesos de algorítmica matemática y modelización, en contextos de la realidad y en contextos matemáticos.

I.12 - Confianza en las propias capacidades para desarrollar actitudes adecuadas y afrontar las dificultades propias del trabajo científico.

I.13 - UTILIZACIÓN DE MEDIOS TECNOLÓGICOS EN EL PROCESO DE APRENDIZAJE:

I.13.1 - La recogida ordenada y la organización de datos.

I.13.2 - La elaboración y creación de representaciones gráficas de datos numéricos, funcionales o estadísticos.

I.13.3 - Facilitar la comprensión de propiedades geométricas o funcionales y la realización de cálculos de tipo numérico, algebraico o estadístico.

I.13.4 - El diseño de simulaciones y la elaboración de predicciones sobre situaciones matemáticas diversas.

I.13.5 - La elaboración de informes y documentos sobre los procesos llevados a cabo y los resultados y conclusiones obtenidos.

I.13.6 - Comunicar y compartir, en entornos apropiados, la información y las ideas matemáticas.

## **BLOQUE II. NÚMEROS Y ÁLGEBRA**

II.1 - Estudio de las matrices como herramienta para manejar y operar con datos estructurados en tablas y grafos.

II.2 - Clasificación de matrices.

II.3 - Operaciones con matrices.





II.4 - Aplicación de las operaciones de las matrices y de sus propiedades en la resolución de problemas extraídos de contextos reales.

II.5 - Determinantes.

II.6 - Propiedades elementales de los determinantes.

II.7 - Rango de una matriz.

II.8 - Matriz inversa.

II.9 - Representación matricial de un sistema de ecuaciones lineales: Sistemas equivalentes.

II.10 - Discusión según parámetros.

II.11 - RESOLUCIÓN DE SISTEMAS.

II.11.1 - Aplicación del método de Gauss.

II.11.2 - Aplicación de la regla de Cramer.

II.12 - Resolución de problemas reales mediante matrices y sistemas de ecuaciones lineales

### **BLOQUE III. ANÁLISIS MATEMÁTICO**

III.1 - LÍMITE DE UNA FUNCIÓN:

III.1.1 - En un punto y en los dos infinitos.

III.1.2 - Rectas asíntotas.

III.2 - Continuidad de una función: En un punto, en un intervalo y en su dominio.

III.3 - Tipos de discontinuidad.

III.4 - Teorema de Bolzano para funciones continuas en un intervalo. Aproximación de la solución de una ecuación.

III.5 - FUNCIÓN DERIVABLE EN UN PUNTO:

III.5.1 - Interpretaciones de la derivada.

III.5.2 - Recta tangente a la gráfica de una función en un punto.

III.6 - Función derivada.

III.7 - Tabla de derivadas de las funciones elementales.

III.8 - Técnicas de derivación.

III.9 - Teorema de Rolle y Teorema del valor medio.

III.10 - La regla de l'Hôpital. Aplicaciones al cálculo de límites.

III.11 - ESTUDIO DE LA VARIACIÓN DE UNA FUNCIÓN:

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III.11.1 - Aplicaciones de la derivada.

III.11.2 - Problemas de optimización.

III.12 - Funciones primitivas de una función. Integral indefinida.

III.13 - Tablas de funciones primitivas de funciones elementales.

III.14 - Técnicas elementales para el cálculo de primitivas.

III.15 - La integral de una función en un intervalo: Integral definida.

III.16 - Teorema del valor medio, Teorema fundamental del Cálculo Integral.

III.17 - Cálculo de una integral definida: Regla de Barrow.

III.18 - Aplicación de la integral y cálculo del área de región plana.

#### **BLOQUE IV. GEOMETRÍA**

IV.1 - Vectores en el espacio tridimensional.

IV.1 - PRODUCTOS DEFINIDOS CON VECTORES:

IV.1.1 - Producto escalar e interpretación geométrica.

IV.1.2 - Producto vectorial e interpretación geométrica.

IV.1.3 - Producto mixto e interpretación geométrica.

IV.3 - PUNTOS DEL ESPACIO:

IV.3.1 - Puntos alineados.

IV.3.2 - Puntos coplanarios.

IV.4 - RECTAS EN EL ESPACIO:

IV.4.1 - Tipos de ecuaciones de una recta.

IV.4.2 - Vectores directores de una recta.

IV.4.3 - Incidencia de una recta en un punto.

IV.4.4 - Haz de rectas.

IV.5 - PLANOS EN EL ESPACIO.

IV.5.1 - Tipos de ecuaciones de un plano.

IV.5.2 - Pareja de vectores directores de un plano.

IV.5.3 - Incidencia de un plano en un punto.

IV.5.4 - Haz de planos.

IV.6 - POSICIONES RELATIVAS:

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IV.6.1 - De planos, de rectas y de rectas y planos.

IV.6.2 - Paralelismo y perpendicularidad.

IV.7 - PROPIEDADES MÉTRICA EN EL ESPACIO:

IV.7.1 - Medida de ángulos.

IV.7.2 - Medidas de distancias.

IV.7.3 - Medidas de áreas.

IV.7.4 - Medida de volúmenes.

## **BLOQUE V. ESTADÍSTICA Y PROBABILIDAD**

IV.1 - Reiteración de sucesos:

IV.1 - Frecuencia relativa.

IV.1 - Probabilidad de un suceso: Regla de Laplace.

IV.2 - Axiomática de Kolmogorov.

IV.3 - Aplicación de la combinatoria al cálculo de probabilidades.

IV.4 - Experimentos aleatorios simples y compuestos.

IV.5 - Probabilidad condicionada.

IV.6 - Dependencia e independencia de sucesos.

IV.7 - Teoremas de la probabilidad total y de Bayes.

IV.8 - Probabilidades iniciales y finales y verosimilitud de un suceso.

IV.9 - Variables aleatorias discretas.

IV.10 - Distribución de probabilidad.

IV.11 - Media, varianza y desviación típica.

IV.12 - Distribución binomial. Caracterización e identificación del modelo. Cálculo de probabilidades.



## QUÍMICA

Tema 0. Formulación inorgánica.

Tema 1. Formulación orgánica, isomería y reactividad.

Tema 2. Estequiometría.

Tema 3. Estructuras electrónicas y sistema periódico.

Tema 4. Enlace químico.

Tema 5. Cinética química.

Tema 6. Equilibrio químico.

Tema 7. Equilibrio ácido-base.

Tema 8. Equilibrio de solubilidad.

