



Syllabus

Cambridge International AS & A Level Digital Media & Design 9481

This syllabus will first be available for examination at AS Level in June and November 2019.
This syllabus will be available for examination at AS & A Level in June and November 2020
and 2021.



Why choose Cambridge?

Cambridge Assessment International Education prepares school students for life, helping them develop an informed curiosity and a lasting passion for learning. We are part of the University of Cambridge.

Our international qualifications are recognised by the world's best universities and employers, giving students a wide range of options in their education and career. As a not-for-profit organisation, we devote our resources to delivering high-quality educational programmes that can unlock learners' potential.

Our programmes and qualifications set the global standard for international education. They are created by subject experts, rooted in academic rigour and reflect the latest educational research. They provide a strong platform for students to progress from one stage to the next, and are well supported by teaching and learning resources.

We review all our syllabuses regularly, so they reflect the latest research evidence and professional teaching practice – and take account of the different national contexts in which they are taught.

We consult with teachers to help us design each syllabus around the needs of their learners. Consulting with leading universities has helped us make sure our syllabuses encourage students to master the key concepts in the subject and develop the skills necessary for success in higher education.

Our mission is to provide educational benefit through provision of international programmes and qualifications for school education and to be the world leader in this field. Together with schools, we develop Cambridge learners who are confident, responsible, reflective, innovative and engaged – equipped for success in the modern world.

Every year, nearly a million Cambridge students from 10 000 schools in 160 countries prepare for their future with an international education from Cambridge International.

'We think the Cambridge curriculum is superb preparation for university.'

Christoph Guttentag, Dean of Undergraduate Admissions, Duke University, USA



Quality management

Our systems for managing the provision of international qualifications and education programmes for students aged 5 to 19 are certified as meeting the internationally recognised standard for quality management, ISO 9001:2008. Learn more at www.cambridgeinternational.org/ISO9001

Cambridge Assessment International Education is part of the Cambridge Assessment Group. Cambridge Assessment is the brand name of the University of Cambridge Local Examinations Syndicate (UCLES), which itself is a department of the University of Cambridge.

UCLES retains the copyright on all its publications. Registered centres are permitted to copy material from this booklet for their own internal use. However, we cannot give permission to centres to photocopy any material that is acknowledged to a third party even for internal use within a centre.

Contents

1 Why choose this syllabus?	2
2 Syllabus overview	6
Aims	6
Content overview	7
Assessment overview	8
Assessment objectives	9
3 Subject content	11
Skills and understanding common to all areas of study	11
Digital photography	13
Moving image	14
Mobile and multimedia applications	15
4 Details of the assessment	17
Component 1 Portfolio	17
Component 1 Portfolio themes	18
Component 2 Externally Set Assignment	22
Component 3 Personal Investigation	23
Sample Outline Proposal Form for Component 3: Digital photography	24
Sample Outline Proposal Form for Component 3: Moving image	24
Sample Outline Proposal Form for Component 3: Mobile and multimedia applications	25
Avoidance of plagiarism	25
Assessment criteria for Component 1 and Component 2	26
Assessment criteria for Component 3	28
5 What else you need to know	31
Before you start	31
Making entries	32
After the exam	33
How students, teachers and higher education can use the grades	34
Grade descriptions	34

Changes to this syllabus

The latest syllabus is version 1, published September 2017.



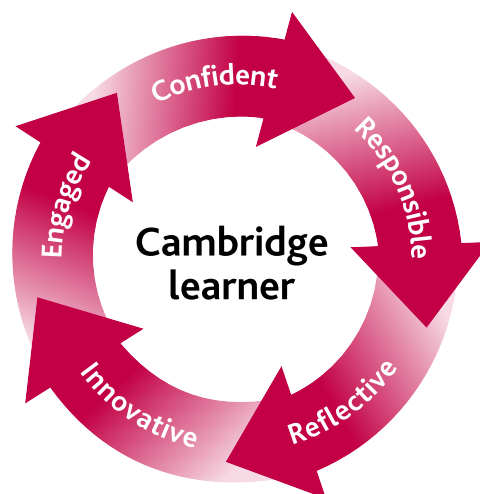
1 Why choose this syllabus?

Key benefits

The best motivation for a student is a real passion for the subject they're learning. By offering students a variety of Cambridge International AS & A Levels, you can give them the greatest chance of finding the path of education they most want to follow. With over 50 subjects to choose from, students can select the ones they love and that they're best at, which helps motivate them throughout their studies.

Following a Cambridge International AS & A Level programme helps students develop abilities which universities value highly, including:

- a deep understanding of their subjects
- higher order thinking skills – analysis, critical thinking, problem solving
- presenting ordered and coherent arguments
- independent learning and research.



Cambridge International AS & A Level Digital Media & Design encourages independent creative expression and the development of a critical, reflective practice. The syllabus provides opportunities for learners to enrich their understanding of innovative uses of technology and to improve their skills in a wide range of contemporary techniques. The syllabus is designed to accommodate a range of interests, materials and resources, and the skills and interests of the teaching staff.

Our approach in Cambridge International AS & A Level Digital Media & Design encourages learners to be:

confident, identifying, researching and evaluating problems in a systematic way and improving technical skills to support development of learners' personal design style

responsible, taking charge of their own development as designers, with an independent approach to creative and technical practice

reflective, recording ideas and critically evaluating their work to help learners to continually review, refine and adapt

innovative, combining approaches and techniques and developing the skills to solve problems creatively

engaged, enriching their work by exploring different designers, processes and concepts.

'Cambridge students develop a deep understanding of subjects and independent thinking skills.'

Tony Hines, Principal, Rockledge High School, USA

Key concepts

Key concepts are essential ideas that help students develop a deep understanding of their subject and make links between different aspects. Key concepts may open up new ways of thinking about, understanding or interpreting the important things to be learned.

Good teaching and learning will incorporate and reinforce a subject's key concepts to help students gain:

- a greater depth as well as breadth of subject knowledge
- confidence, especially in applying knowledge and skills in new situations
- the vocabulary to discuss their subject conceptually and show how different aspects link together
- a level of mastery of their subject to help them enter higher education.

The key concepts identified below, carefully introduced and developed, will help to underpin the course you will teach. You may identify additional key concepts which will also enrich teaching and learning.

The key concepts for Cambridge International AS & A Level Digital Media & Design are:

- **Communication**
The essential purpose of any piece of digital design is to communicate. Designers need to understand that the relationship their work builds with the audience is influenced by many things, including their chosen media and methods. Effective communication is also essential for operating in today's design world, which demands collaboration and engagement with wider cultures and emerging technologies.
- **Creativity**
Creativity is at the heart of a designer's processes. It pushes designers to question, investigate, experiment and take risks to create solutions that are original and effective. Creative practitioners use curiosity, imagination and innovation to solve design problems in new ways.
- **Innovation**
Innovation means experimenting with processes, approaches and technologies. A willingness to innovate builds confidence, and helps develop awareness of new ways of looking at things, which is fundamental to digital media and design. A skilled designer selects the techniques and processes that communicate their message in the most effective way.
- **Intention**
An intention is the starting point of any project, from which a designer starts to develop ideas. An intention or purpose can come from a brief, proposal or research, while at other times it might begin as an idea or feeling. Though an intention is the reason to start a project, it is important to understand that the intention can evolve as work develops.
- **Critical reflection**
Critical reflection and user feedback is the ongoing process that helps designers to learn what works and what doesn't. Designers need to evaluate how the media, techniques and processes they choose affect how their work communicates meaning. This process can help work become more relevant and coherent.
- **Research and context**
First-hand research helps designers to develop their ideas and refine their practice. Actively researching and responding to other practitioners, cultures and creative movements gives the designer a broader view. A designer can use this to improve their practice and understand how their work connects with its intended audience.

Recognition and progression

Every year thousands of students with Cambridge International AS & A Levels gain places at leading universities worldwide. Cambridge International AS & A Levels are accepted across 195 countries. They are valued by top universities around the world including those in the UK, US (including Ivy League universities), Europe, Australia, Canada and New Zealand.

UK NARIC, the national agency in the UK for the recognition and comparison of international qualifications and skills, has carried out an independent benchmarking study of Cambridge International AS & A Level and found it to be comparable to the standard of AS & A Level in the UK. This means students can be confident that their Cambridge International AS & A Level qualifications are accepted as equivalent, grade for grade, to UK AS & A Levels by leading universities worldwide.

Cambridge International AS Level Digital Media & Design makes up the first half of the Cambridge International A Level course in Digital Media & Design and provides a foundation for the study of digital media and design at Cambridge International A Level. Depending on local university entrance requirements, students may be able to use it to progress directly to university courses in digital media and design or some other subjects. It is also suitable as part of a course of general education.

Cambridge International A Level Digital Media & Design provides a foundation for the study of digital media and design or related courses in higher education. Equally it is suitable as part of a course of general education.

For more information about the relationship between the Cambridge International AS Level and Cambridge International A Level see the 'Assessment overview' section of the Syllabus overview.

We recommend learners check the Cambridge International recognitions database and the university websites to find the most up-to-date entry requirements for courses they wish to study.

Learn more at www.cambridgeinternational.org/recognition

'The depth of knowledge displayed by the best A Level students makes them prime targets for America's Ivy League universities'

Yale University, USA

Supporting teachers

We provide a wide range of practical resources, detailed guidance, and innovative training and professional development so that you can give your learners the best possible preparation for Cambridge International AS & A Level.



'Cambridge International AS & A Levels prepare students well for university because they've learnt to go into a subject in considerable depth. There's that ability to really understand the depth and richness and the detail of a subject. It's a wonderful preparation for what they are going to face at university.'

US Higher Education Advisory Council

2 Syllabus overview

Aims

The aims describe the purposes of a course based on this syllabus.

The aims are to enable students to:

- develop awareness of the world of digital media and design and understand influencing factors and contexts
- develop creative processes and understand that design is an iterative process
- research and evaluate information relevant to their studies
- reflect requirements and feedback from specific audiences and clients in developing their work
- use digital media creatively as a way of expressing meaning
- use knowledge, understanding and creativity to innovate using appropriate software, equipment, technology and practices
- develop the skills needed for the study of digital media and design in higher education
- prepare for working in a collaborative industry.



Support for Cambridge International AS & A Level Digital Media & Design

Our School Support Hub www.cambridgeinternational.org/support provides Cambridge schools with a secure site for downloading specimen and past question papers, mark schemes, grade thresholds and other curriculum resources specific to this syllabus. The School Support Hub community offers teachers the opportunity to connect with each other and to ask questions related to the syllabus.

Content overview

Cambridge International AS & A Level Digital Media & Design is for candidates who want to explore a range of processes and techniques in digital media.

The subject content allows space for teaching and learning to be creative. It is grouped into three broad areas of study:

- Digital photography
- Moving image
- Mobile and multimedia applications.

You do not have to cover all three areas of study to deliver this qualification. You can structure a course around a single area of study or you can create a course which includes a combination of two or three areas of study. The choice of content will depend on the interests of teachers and candidates as well as the resources and expertise available at the school.

Candidates can complete the assessment components in any of the areas of study.

The subject content includes a list of skills, knowledge and understanding common to all areas of study as well as skills, techniques, knowledge and understanding specific to individual areas of study.

Across the syllabus, the emphasis is on a personal response and the creative journey the candidate takes to fulfil a design brief, whether the brief is generated by the candidate or set by Cambridge International.

Candidates wishing to study Cambridge International AS & A Level Digital Media & Design with another Cambridge International AS & A Level might wish to combine this syllabus with AS & A Level Art & Design, or to combine this syllabus with Computer Science, Information Technology or Design & Technology, to develop their creative skills alongside more technical study.

Assessment overview

Component 1

Portfolio

100 marks

Candidates choose a theme from the list in the syllabus.

There are **two** elements to the portfolio:

- supporting studies **and**
- a proposal

Externally assessed

50% of the AS Level

25% of the A Level

Component 3

Personal Investigation

100 marks (weighted to 200 marks)

This is a practical component supported by written work. Candidates research a topic or theme of their choice.

There are **two** elements to the investigation:

- a final practical outcome **and**
- written analysis (1000–1500 words)

Externally assessed

50% of the A Level

Component 2

Externally Set Assignment 10 hours

100 marks

Candidates choose one assignment from the question paper.

There are **two** elements to the assignment:

- supporting studies **and**
- a final outcome, produced during a supervised test of 10 hours' total duration

Externally assessed

50% of the AS Level

25% of the A Level

Please check the timetable at www.cambridgeinternational.org/timetables for the test date window for Component 2.

Please check the samples database at www.cambridgeinternational.org/samples for submission information and deadlines for Components 1 and 3.

There are three routes for Cambridge International AS & A Level Digital Media & Design:

Route	Component 1	Component 2	Component 3
1 AS Level only (Candidates take both AS components in the same series)	✓	✓	
2 A Level (staged over two years) Year 1 AS Level	✓	✓	
Year 2 Complete the A Level			✓
3 A Level (Candidates take all components in the same examination series)	✓	✓	✓

Assessment objectives

The assessment objectives (AOs) are:

AO1 Research and record

Research and record ideas, observations and insights relevant to intentions, reflecting critically on work and progress

- generate and research ideas from a variety of appropriate sources
- record and analyse information relevant to ideas

AO2 Explore and select

Explore and select appropriate media, materials and technology, reviewing and refining ideas as work develops

- explore a range of media, materials or technology appropriate to ideas
- review and refine digital solutions to the brief

AO3 Develop ideas

Develop ideas or concepts through investigations informed by feedback, testing and constraints, demonstrating critical understanding

- make informed judgements through testing, development and understanding relevant constraints
- use visual and other forms to express ideas or concepts relevant to the brief

AO4 Produce

Produce a personal digital response that realises intentions and, where appropriate, makes connections between digital and design elements

- show personal vision and commitment through a creative digital response
- present an informed response through personal evaluation, reflection and critical thinking

Weighting for assessment objectives

The approximate weightings allocated to each of the assessment objectives (AOs) are summarised below.

Assessment objectives as a percentage of each component

Assessment objective	Weighting in components %		
	Component 1	Component 2	Component 3
AO1 Research and record	25	25	25
AO2 Explore and select	25	25	25
AO3 Develop ideas	25	25	25
AO4 Produce	25	25	25

Assessment objectives as a percentage of each qualification

Assessment objective	Weighting in AS Level %	Weighting in A Level %
AO1 Research and record	25	25
AO2 Explore and select	25	25
AO3 Develop ideas	25	25
AO4 Produce	25	25

3 Subject content

Cambridge International AS & A Level Digital Media & Design is for candidates who want to explore a range of processes and techniques in digital media.

The subject content is grouped into three broad areas of study:

- Digital photography
- Moving image
- Mobile and multimedia applications.

You do not have to cover all three areas of study to deliver this qualification. You can structure a course around a single area of study or you can create a course which includes a combination of two or three areas of study. The choice of content will depend on the interests of teachers and candidates as well as the resources and expertise available at the school.

Candidates can complete the assessment components in any of the areas of study.

In some schools it might be appropriate to take a single area of study; other schools may wish to offer candidates the opportunity to learn new skills in a range of areas before they choose an area of study in which to specialise. At this level, candidates are not expected to cover every element within the chosen area(s) of study.

Candidates can complete the components in any of the areas of study, but they should select the most appropriate media, techniques and processes relevant to their chosen idea, the concept and their level of skill.

The qualification encourages a personal response that is based on knowledge, understanding and skills in digital media and design. Candidates are not expected to demonstrate complex technological skills (e.g. be able to build and code websites) or be expert in a range of software. Candidates should understand the relationship between technical ability and creative activity. They should be able to document their technical understanding and also show the critical and analytical processes they have used to review and refine their work as they develop their ideas.

You are expected to spend some time during the first year of study introducing principles of design and allowing candidates to become familiar with different media, to build up skills and to experiment with smaller projects.

Skills and understanding common to all areas of study

Some skills apply to all three areas of study. These should be embedded in the course for all candidates:

- researching and exploring resources, techniques and processes
- selecting and organising information
- generating ideas and starting to develop technical skills to present their ideas
- reflecting and refining ideas and designs as their work develops.

Candidates should be encouraged to demonstrate knowledge and understanding of:

Working to a brief

- planning for a specific digital outcome
- constraints (e.g. budget, location or resources, customer or client requirements, software and technology restrictions, accessibility)
- working to a deadline
- working with other practitioners, clients, audiences, customers and contractors

Ethical considerations of digital media and design

- sustainability, ethical manufacturing, life span and end life of product (e.g. renewable, recyclable, not harmful to the environment at any stage)
- copyright and intellectual property integrity
- benefits of good design (e.g. improving accessibility)
- online ethics, data protection and safeguarding
- digital footprint

Critical and contextual understanding

- researching into artists, designers, genres, design movements and technological advancements
- making judgements about factors affecting the designs, people and technologies researched
- drawing on cultural connections and personal experiences
- understanding social and political contexts, economic or environmental factors, advances in technology and the impact of change

Design theories

- colour theory
- semantics
- unity, harmony, balance
- form and function
- semiotics
- user experience (UX) and user interface (UI)
- responsive design

Drawing for design

- visual language
- communicating ideas
- expression
- meaning
- narrative

Formal elements of design

- line
- tone
- form
- shape
- volume
- texture
- scale
- aesthetics
- positive and negative space

Evaluation and testing of design

- exploring and making judgements about the suitability of design decisions
- making changes based on user testing and feedback
- showing how research has informed the design and how feedback and testing have been considered at key stages in the development and resolution of ideas

Digital photography

Digital photography can include a number of aspects and it might be appropriate to select a few to study in depth rather than try to cover all aspects.

Completed work should have an intended application such as portraiture, landscape, documentary, still-life or editorial. It is expected that candidates will use image manipulation skills and post-production techniques to create images, and candidates will combine photography skills with software skills to produce a digital outcome. Digital photography as a means of recording and image making can also be used for gathering and researching ideas that may be developed in another area of study.

Skills and techniques

Candidates should be able to select the most appropriate skills, techniques and processes to develop their chosen idea. They will be required to demonstrate the following:

- communicating ideas and meaning visually
- using scale, composition and formal elements to construct images
- capturing and recording images using digital photographic skills
- using technical ability including depth of field, shutter speed, exposure, angle and viewpoint
- using lighting, shadow, balance, contrast, texture, tension
- selecting, editing and manipulating digital images
- planning, preparing equipment and resources for digital photography
- keeping technical logs, using relevant specialist technical language
- using a range of appropriate equipment, e.g. cameras, lenses, filters, formats, projectors, lighting, props
- selecting correct file size, naming conventions and resolution depending on the task
- using software for editing and post-production of own images.

Knowledge and understanding

Candidates should understand different styles and genres of photography. They should be able to describe how their final images, composition and manipulation relate to social, cultural, geographical or historical contexts. Candidates should be able to communicate meaning through their images and be able to select the appropriate working style or genre for different types of photography, depending on the theme or brief.

Candidates should also demonstrate understanding of how their images will be viewed, depending on the brief.

Moving image

Moving image practice has origins in fine art, experimental and independent cinema. This area of study explores the relationships between video, digital technologies and creative expression in physical and online environments.

It can include animation – either hand-drawn, stop frame or digital. It could also cover moving elements in web-based products and digital film-making. You can structure a course that focuses on any of these forms of expression depending on the technology and resources available.

Candidates are encouraged to think of moving image as a dynamic and thriving area of art practice, which can be located in a host of venues from galleries to public digital advertising and web content.

Completed work could have a commercial application, such as advertising, stand-alone video short, film or animation.

Skills and techniques

Candidates should be able to select the most appropriate skills, techniques and processes to develop their chosen idea. They will be required to demonstrate the following:

- communicating ideas and meaning visually
- storyboarding and image-making through photography, modelling, drawing and/or illustration
- researching locations, if needed, for filming or for site-specific works
- planning and preparing equipment and resources
- briefing participants/actors, casting
- producing scripts and shot lists
- character developing or modelling for animation
- using appropriate software
- selecting, editing and manipulating video sequences from their own work using a range of appropriate equipment
- keeping technical logs, using relevant specialist technical language
- managing resources, e.g. cameras, lenses, filters, formats, projectors, lighting, props.

Knowledge and understanding

Candidates should understand different styles, genres and techniques of moving image. They should be able to describe how the direction and production of their moving images relate to social, cultural, geographical or historical contexts.

Candidates should also demonstrate an understanding of their audience and how the finished outcome will be viewed.

Mobile and multimedia applications

Candidates can choose to produce work for a variety of different mobile and multimedia applications, although it may be necessary to focus on one or two areas of specialism in such a broad area of study.

Mobile and multimedia applications include web and mobile applications, games, interactive media and digital installation.

Candidates should consider technological, resource and time constraints when deciding on the concept to be developed. It may be that a prototype is all that is required to fulfil the brief for the assessment in which case the quality of ideas should not be limited or restricted.

Candidates might choose to develop ideas which include a combination of photography and moving image within a digital context. Ideas generation could be combined with drawing and software skills to create concept artwork, environments, gameplay, storyboards or character development related to a theme or brief. Supporting work for digitally produced work should include evidence of the development of ideas and of understanding techniques and processes.

Skills and techniques

Candidates should be able to select the most appropriate skills, techniques and processes to develop their chosen idea. They will be required to demonstrate the following skills:

- generating ideas through drawing, concept art, narrative image-making
- storyboarding and pitching ideas and concepts
- planning, preparing equipment and resources
- character developing and scripting
- using composition, viewpoints, timing and pace
- understanding and using a workflow strategy
- directing, producing, editing, post-production
- using relevant specialist technical language, keeping technical logs
- creating menus and hyperlinked objects for interactive displays
- selecting, editing and manipulating video sequences of their own work using a range of appropriate equipment
- choosing appropriate formats, resolutions and content enhancement
- using web-based hosting or storage services for online media.

Candidates will be expected to work with appropriate software as available. Coding is not a requirement unless it is an integral part of the outcome. Prototype platform games, massive multiplayer online games (MMO) and role player games (RPG) concepts should have age-appropriate content and themes.

Knowledge and understanding

Candidates should understand different styles, genres and platforms for mobile and multimedia applications. They should be able to describe how interactivity and user experience in their designs relate to social, cultural, geographical or historical contexts.

Candidates should also demonstrate appropriate choices based on their intended audience in relation to concepts such as bandwidth limitations, responsive sites, processing power and screen size to increase accessibility, enjoyment and ease of use.

Digital content is often used more than once across different platforms and it is important for content creators to consider how the media will be accessed. Candidates should demonstrate an understanding of how their end product will be shown or how the user will interact and engage with the digital outcome.

4 Details of the assessment

For each component, candidates work towards a client brief or a scenario. Candidates should reflect the constraints of audience or client requirements as they develop their ideas in their chosen area or areas of study. Candidates can approach any component in any of the areas of study. It is expected that there will be some crossover between areas depending on the resources available and the outcomes for each component.

Component 1 Portfolio

Component 1 is an AS Level component.

There are two elements to the portfolio:

- supporting studies **and**
- a proposal.

Cambridge International assess both parts together and award a **single mark** out of 100.

There is no question paper for this component.

Candidates should choose one theme from the themes listed overleaf. The themes have been structured to guide candidates through the stages required to meet the assessment objectives while giving flexibility to schools over the content and chosen area of study. The themes provide a brief, a choice of proposals to answer the brief, some suggested areas to start research and exploration with guidance on the type of expected outcome. For this component, candidates are expected to research and develop ideas and to present their proposal as a pitch or presentation.

Candidates should research the selected theme, exploring and developing ideas and concepts for their chosen proposal. The proposal should be a presentation of ideas, concepts or prototypes. The focus of the proposal is on the ideas, rather than a fully resolved outcome.

The Portfolio should show generation and exploration of ideas. Candidates can use a range of stimuli to start their research. This doesn't have to be limited to digital design and artwork but could include references such as theatre, prose, literature or film. Similarly, candidates could focus on design, technological, socio-cultural or other contexts. While many candidates may use an internet search engine or a photo sharing website for inspiration, the most successful work will demonstrate thorough and detailed recording from first-hand sources. All sources must be credited and candidates should make it clear where imagery is their own. Candidates are expected to use note-taking, photography and drawing to gather research and to communicate ideas.

Candidates should carefully select work for the supporting studies to show:

- research of ideas and critical reflection
- exploration of media, materials and technology
- development and editing of ideas
- a personal response which makes connections between digital and design elements.

The supporting studies will be marked against the same criteria as the proposal. Candidates should select and present work for assessment that meets the assessment criteria for Component 1.

Candidates submit the Portfolio to Cambridge International digitally. Candidates are required to submit a Portfolio showing 10 pages/screens of supporting studies or the equivalent and a final presentation of their proposal.

Refer to the samples database at www.cambridgeinternational.org/samples for submission dates for this component.

Component 1 Portfolio themes

Candidates must choose one of the following themes:

Theme 1: Boundaries

Boundaries can be imposed by others, be self-imposed, physical and/or unseen. Explore what is meant by a boundary to develop your own idea or concept for a digital element to be included in an exhibition based on boundaries.

Focus on one or more of the following aspects of boundaries:

- unseen boundaries: political boundaries, class, emotional space, point of no return, permissions
- geographical boundaries: mountains, contours, borders, frontiers, edges, zones, firewalls, walls, protection, shells, perimeters, enclosures, limits, lines, rivers, coastlines

Suggestions for initial research:

- charitable organisations working across national and political boundaries
- photographers and artists who explore and challenge boundaries
- documentary film-makers
- cartographers, aerial drone photography
- books, films, song lyrics

Develop a proposal for:

- a short film or documentary
- a series of images
- an animation, visual display or projection
- elements for an interactive display or map
- an app or game environment
- your own idea.

Theme 2: The digital classroom

Digital tools for teaching are changing the face of our classrooms and the way that people communicate, teach and learn. Explore ways that you could enhance the digital classroom creatively – this could be exploring how digital technology can change the environment where people learn, virtual teaching, use of technology, and how games and interactive media can make the experience of learning more enjoyable.

Focus on one or more of the following aspects of the digital classroom:

- contexts: traditional teaching or training environment, remote and distance learning
- stage: pre-school, primary, secondary and tertiary
- learning styles
- access to learning, virtual learning, mobile learning
- wider skills: study skills, problem-solving, teamwork and employability skills, heritage skills

Suggestions for initial research:

- recent developments in digital learning, leapfrogging, e.g. bypassing computers and going straight to tablet and mobile learning
- centralised learning, national curriculum
- games, apps and websites for education
- existing virtual learning environments (VLEs)
- photovoice participatory visual research: Caroline C Wang and Mary Ann Burris
- internet safety, safeguarding, online anti-bullying campaigns

Develop a proposal for:

- digital learning material (e.g. a quiz, presentation or game for a subject of your choice)
- tutorial, 'how to' or visual glossary to support learners
- an animation or game to prepare a child for their first day of school
- a film, documentary or animation
- a new type of digital learning environment
- your own idea.

Theme 3: Digital poetry

Develop ideas for work to be included in a digital poetry and spoken word festival. This can be online or in a venue with some element of social media interaction.

Focus on one or more of the following aspects of poetry and spoken word:

- guerilla poetry: poetry readings in unusual places
- digital poetry, rap music, slam poetry, traditional poetry
- interactions between audience and performance poets
- relationship between art and language
- communication, meaning, expression

Suggestions for initial research:

- artists who use text and/or lighting in their work: Dan Flavin, Bruce Nauman; Ecstatic Alphabets MoMA, conceptual artists who use text (e.g. Lawrence Weiner)
- spoken word poets, digital poets, rap, performance artists, traditional poets
- *haiku* and formal poem structures, spoken word festivals

Develop a proposal for:

- a series of images that combine text and imagery
- a visual display or projection
- a short film or animation
- elements for an interactive game or information source
- advertising for the festival
- your own idea.

Theme 4: Emotions

Artists and designers often draw on their own experiences and feelings to create their works. Develop your own idea or concept for a piece of digital work to be included in an exhibition based on the theme of emotions. Your ideas should show an understanding of the theme, audience and how it could be displayed. You should show your development of ideas and the concepts as a presentation.

Focus on one or more of the following aspects of expression:

- creative ways of exploring emotions
- expressing feeling without words
- symbolism, meaning and semiotics

Suggestions for initial research:

- song lyrics, poetry, prose using examples that explore intense or powerful emotions
- artists who explore intense emotions or self-awareness in their work such as Frida Kahlo, Mona Hatoum, Bill Viola

Develop a proposal for:

- a short film or animation about an emotion
- a documentary about love
- a series of images exploring a range of emotions
- a digital element for a website or an app based on the theme
- elements for a game
- your own idea.

Theme 5: Travel

Travel can include modes of transport, destinations, publicity and information, or it can be adventure, exploration and journeys. Explore the theme of travel creatively in one of the areas listed below.

Focus on one or more of the following aspects of travel:

- modes of transport
- destinations
- traffic
- street furniture or signage
- advertising, maps or information
- bridges and crossings

Suggestions for initial research:

- promotional material about destinations
- travel photography, documentaries and films
- travel diaries and books, *National Geographic*
- signage designer Margaret Calvert
- artists such as Sebastião Salgado who use photography to document and celebrate remote parts of the world
- Richard Long and artists whose work responds to the environment in which it is located

Develop a proposal for:

- a short film about a travel destination
- a documentary or animation
- a series of images about a place, travel or mode of transport
- a promotional film, animation, or element for a website or app
- visuals for an interactive display, map or game
- your own idea.

Theme 6: Wellbeing

The local government wishes to promote exercise as part of a wellbeing initiative. Choose one aspect of this theme to research and develop your ideas for a promotional tool that could be used to raise awareness of the benefits of exercise for wellbeing.

Focus on one or more of the following aspects of wellbeing:

- exercise
- healthy eating
- mental health
- mindfulness
- routes and maps for walking or cycling
- tracking devices for exercise or activity

Suggestions for initial research:

- local, national and international initiatives for exercise and mental health awareness
- governments and cities that have succeeded in changing exercise habits through promotion of exercise
- wearable tech (e.g. GPS for runners)
- World Health Organization for data and international health awareness campaigns

Develop a proposal for:

- an app or interactive map
- a type of wearable tech
- characters or storyboards for an animation
- an awareness campaign
- an advertisement
- your own idea.

Component 2 Externally Set Assignment

Component 2 is an AS Level component. This is an externally set assignment that is marked by Cambridge International. There is a question paper for this component. You may download the question paper from Cambridge International. You may download the question paper and give it to the candidates as soon as it is released.

There are two elements to the assignment:

- supporting studies **and**
- a final outcome produced during a supervised test of 10 hours' total duration.

Cambridge International will assess both parts together and award a **single mark** out of 100.

Candidates choose **one** assignment from a choice of three on the question paper.

The supporting studies are produced during the preparation period, after candidates receive the question paper and before the supervised test. During the preparation period candidates should research, plan, reflect on and develop ideas for their response to the assignment they have chosen from the question paper. Candidates should carefully select work for the supporting studies to show:

- research of ideas and critical reflection
- exploration of media, materials and technology
- development and editing of ideas
- a personal response which makes connections between digital and design elements.

The supporting studies will be marked against the same criteria as the final outcome.

There is no limit to the preparation time but candidates must have a minimum of four weeks to complete their supporting studies. The focus of Component 2 is to develop a creative solution to a brief within a set time frame. Candidates must show evidence of their research and development of ideas, while working towards a final outcome. Where software is used, screenshots should be included to show how ideas have been developed, e.g. showing the selection of tools and manipulation of imagery. Candidates must use their own imagery and credit all sources used in their research.

Supporting studies should be taken into the supervised test. During the test candidates should record, edit and manipulate materials used in the examination piece as well as rendering, saving or printing their work. The supporting studies must not be removed or added to once the supervised test has started. Both the supporting studies and the final outcome must remain under secure conditions throughout the test period.

Candidates submit their supporting studies and the final outcome to Cambridge International digitally.

Refer to the *Cambridge Handbook* for the year of examination to find examination guidelines and submission dates for examined work.

Component 3 Personal Investigation

Component 3 is the A Level component. This is an internally set assignment that is marked by Cambridge International.

There are two elements to the personal investigation:

- a final practical outcome **and**
- written analysis of 1000–1500 words.

Cambridge International will assess both parts together and award a **single mark** out of 100.

Component 3 is weighted at 50 per cent of the qualification. This component is marked against the A Level assessment criteria. The assessment criteria for Component 3 reflect the additional level of independent research required for this component and the written analysis that supports the practical outcome.

There is no question paper for this component. Candidates identify a topic or theme of their choice that is informed by an aspect of digital media and design within one of the areas of study. You can provide guidance to help candidates develop an original focus and title. Candidates are strongly advised to submit an outline proposal form (OPF) to Cambridge International before they start work on their personal investigation. The OPF should describe the brief, context or scenario, including the client or audience, and how the assessment objectives will be met. Candidates should also outline the technical skills and resources required and show how they will review and evaluate their ideas as they develop. The OPFs, and the instructions for completing them, are available to download from the samples database at www.cambridgeinternational.org/samples

The aim of the Personal Investigation is for candidates to engage in a self-directed period of sustained and focused study. This study should bring together the skills they have developed so far and demonstrate that they are able to work independently to resolve a given idea.

The project should be personal, reflecting the interest and developing the skills most applicable to each candidate. While this may develop a theme or skills covered in one of the AS components, the focus, scope and outcome should be different. It would not be appropriate for a whole class to do a similar project for Component 3. You may help candidates to plan their project and read drafts of the written element in its early stages. You should regularly check progress and give advice on technical elements, but this should be an independent project showing the creative and technical skills of the candidate in one of the areas of study.

The project does not need to be started straight away, and you may wish to spend time with candidates exploring potential themes and developing new skills before they decide on a project and submit a proposal form. Enough time should be set aside for the research and completion of the project before the submission date. Candidates should divide their time into research, development, testing and resolving creative solutions, with steps along the way to review progress and refine ideas.

This is the A Level component and is a substantial piece of independent research. The final outcome should be supported by written and visual critical analysis which clarifies working creative processes. Candidates must provide footnotes and a bibliography or references section; these and any quotations will **not** count towards the final word count. Areas of the work which have been informed by contributions of others should be identified clearly. Candidates are required to sign a declaration that they are the author of their work when submitting this component. The declaration of authenticity is available to download from the coursework samples database at www.cambridgeinternational.org/samples

Candidates are required to submit a final practical outcome – a portfolio of practical work demonstrating a resolved creative outcome in one of the areas of study. Candidates can submit their final practical outcome in any appropriate format for the area of study. The written analysis should consist of 1000–1500 words of continuous prose presented in a format that is related to the final practical outcome. Some candidates might choose to submit this as a supporting document, while others might use the word count as a thread throughout an entire project.

Candidates must submit their final practical outcome and written analysis to Cambridge International digitally.

Refer to the samples database at www.cambridgeinternational.org/samples for the year of examination to find submission dates for this component.

Sample Outline Proposal Form for Component 3: Digital photography

To create a photo-documentary exploring the changing dynamics of family relationships.

For this personal investigation I plan to research contemporary portrait photography, looking at David Hockney and other social photographers such as Jeff Wall and Gregory Crewdson and I will compare how they capture feelings such as intimacy or suspense in their work. This will be presented in the form of an illustrated essay and I will explore some of the same techniques the artists have used, in my own digital photographs.

My research will include comparing and contrasting the different ways the artists have captured visual language in their images. I would like to explore the relationships between people and how they relate to each other, and how this can be demonstrated visually. I am also interested in being able to add dynamism and suspense, so I will be exploring using location shoots at home and then re-creating them in the studio using models, lighting and props to create a different context for the image.

Based on documenting my family over a year, I will produce a series of 10 digital images based on family life. I will use post-production methods to edit and manipulate the images to build up layers and add depth. I plan to do this using software such as Lightroom and Photoshop. I am going to try a range of different format cameras to see which is the most effective in capturing the depth and level of detail that I would like to record.

Sample Outline Proposal Form for Component 3: Moving image

To create a five-minute documentary film to capture the energy and achievements of team sports.

Using interviews, live-action filming, research and historical footage, I will explore the formation, development and energy of a football team at the start of the season. The aim will be to demonstrate the motivational, positively focused biographical documentary in the style of *Undefeated* (the Academy Award Nominee documentary, Manassas Tigers story) or *Survive and Advance* (the underdog story of North Carolina State University). My storyboard will include episode/section breaks, location research, characters in focus and briefings required, shot lists/types of shots (angles, durations), potential interview scripts, the calendar of events (training, meet-ups and games), and the timeframe required for selecting, editing and manipulating video sequences from my footage.

Apart from interviews with the players, fans, coach and other related people, lighting, sound booms and filters will be minimal and provide the look and feel of being in-situ. I will use Adobe Premiere Pro to edit my footage and Adobe Audition or Audacity for sound editing (for audio overlays or soundbites). For the introductory credits, section breaks and closing credits I will use After Effects.

While the film may cover up to a six month period of one season of the team's existence, the final product will be less than five minutes in duration. I aim to capture the energy, emotion and passion through the filmed footage of the players and the fans and will edit the film to capture the pace and drama of a football game.

Sample Outline Proposal Form for Component 3: Mobile and multimedia applications

To create a mobile game application that will help students focus during revision.

I am going to develop a game that helps students maintain their focus during periods of revision and exam preparation. My game will be on a timer that encourages the user to take a short break from their revision every twenty minutes and perform some form of mindfulness activity, a physical activity or a brain teaser. Colours and sounds can help students to make cognitive links to what they have been revising and improve their memory recall. Using the UDK (Unreal Development Kit) or Unity 3D (Unity Game Engine). I will create a single player game that is fun and instantly rewarding for the user.

I will research the most popular revision or memory improvement game apps and also explore effective ways of revising and improving memory in order to include this in my game. As part of the process, I will design the core features in a portfolio of concept artwork and screen designs of the gameplay, environment and characters. For my final submission I will show the screen shots and a short fly-through tutorial of what my finished app will look like.

Avoidance of plagiarism

Candidates must be taught the meaning and significance of plagiarism. Candidates should provide references to all source materials used in their research.

For Components 1 and 3, the candidate is required to sign a declaration stating the Portfolio/Personal Investigation is their own work and you countersign to confirm that you believe the work is that of the candidate. The declaration of authenticity form, and the instructions for completing the form, should be downloaded from the samples database at www.cambridgeinternational.org/samples. Further details can be found in the *Cambridge Handbook*.

Assessment criteria for Component 1 and Component 2

AO1: Research and record ideas, observations and insights relevant to intentions, reflecting critically on work and progress	AO2: Explore and select appropriate media, materials and technology, reviewing and refining ideas as work develops	AO3: Develop ideas or concepts through investigations informed by feedback, testing and constraints, demonstrating critical understanding	AO4: Produce a personal digital response that realises intentions and, where appropriate, makes connections between digital and design elements
25 marks	25 marks	25 marks	25 marks
<p>Excellent skill in researching and recording observations and insights from a variety of sources, relevant to intentions</p> <p>Highly accomplished ability to reflect critically on work and progress</p>	<p>Exploration and selection of relevant media, materials and technology is excellent</p> <p>Highly accomplished and sophisticated ability to review and refine ideas as work develops</p>	<p>Excellent development of ideas or concepts, with reference to the brief provided, through focused investigations</p> <p>Analytical and critical understanding demonstrated through highly accomplished and mature referencing of feedback, testing and constraints</p>	<p>Excellent realisation of intentions demonstrated through a personal digital response</p> <p>Highly accomplished and mature connections made between digital and design elements</p>
21–25	21–25	21–25	21–25
<p>Confident skill in researching and recording observations and insights from a variety of sources, relevant to intentions</p> <p>Highly effective ability to reflect critically on work and progress</p>	<p>Confident exploration and selection of relevant media, materials and technology</p> <p>Highly effective ability to review and refine ideas as work develops</p>	<p>Confident development of ideas or concepts, with reference to the brief provided, through focused investigations</p> <p>Analytical and critical understanding confidently demonstrated through thorough and careful referencing of feedback, testing and constraints</p>	<p>Confident realisation of intentions demonstrated through a personal digital response</p> <p>Highly effective connections made between digital and design elements</p>
16–20	16–20	16–20	16–20
<p>Competent skill in researching and recording observations and insights from a variety of sources, relevant to intentions</p> <p>Good ability to reflect critically on work and progress</p>	<p>Competent exploration and selection of relevant media, materials and technology</p> <p>Good ability to review and refine ideas as work develops</p>	<p>Competent development of ideas or concepts, with reference to the brief provided, through focused investigations</p> <p>Good analytical and critical understanding demonstrated through careful referencing of feedback, testing and constraints</p>	<p>Competent realisation of intentions demonstrated through a personal digital response</p> <p>Good connections made between digital and design elements</p>
11–15	11–15	11–15	11–15

AO1: Research and record ideas, observations and insights relevant to intentions, reflecting critically on work and progress 25 marks	AO2: Explore and select appropriate media, materials and technology, reviewing and refining ideas as work develops 25 marks	AO3: Develop ideas or concepts through investigations informed by feedback, testing and constraints, demonstrating critical understanding 25 marks	AO4: Produce a personal digital response that realises intentions and, where appropriate, makes connections between digital and design elements 25 marks
<p>Satisfactory skill in researching and recording observations and insights from a variety of sources, relevant to intentions</p> <p>Adequate ability to reflect critically on work and progress</p>	<p>Adequate exploration and selection of relevant media, materials and technology</p> <p>Satisfactory ability to review and refine ideas as work develops</p>	<p>Satisfactory development of ideas or concepts, with reference to the brief provided, through focused investigations</p> <p>Adequate analytical and critical understanding demonstrated through some referencing of feedback, testing and constraints</p>	<p>Satisfactory realisation of intentions demonstrated through a personal digital response</p> <p>Adequate connections made between digital and design elements</p>
<p>Limited skill in researching and recording observations and insights from a variety of sources, relevant to intentions</p> <p>Basic ability to reflect critically on work and progress</p>	<p>Limited exploration and selection of relevant media, materials and technology</p> <p>Basic ability to review and refine ideas as work develops</p>	<p>Basic development of ideas or concepts, with reference to the brief provided</p> <p>Limited analytical and critical understanding demonstrated through basic referencing of feedback, testing and constraints</p>	<p>Limited realisation of intentions demonstrated through a personal digital response</p> <p>Basic connections made between digital and design elements</p>
<p>No creditable work</p>	<p>No creditable work</p>	<p>No creditable work</p>	<p>No creditable work</p>
<p>0</p>	<p>0</p>	<p>0</p>	<p>0</p>
<p>1-5</p>	<p>1-5</p>	<p>1-5</p>	<p>1-5</p>
<p>6-10</p>	<p>6-10</p>	<p>6-10</p>	<p>6-10</p>

Assessment criteria for Component 3

<p>AO1: Research and record ideas, observations and insights relevant to intentions, reflecting critically on work and progress</p> <p style="text-align: right;">25 marks</p>	<p>AO2: Explore and select appropriate media, materials and technology, reviewing and refining ideas as work develops</p> <p style="text-align: right;">25 marks</p>	<p>AO3: Develop ideas or concepts through investigations informed by feedback, testing and constraints, demonstrating critical understanding</p> <p style="text-align: right;">25 marks</p>	<p>AO4: Produce a personal digital response that realises intentions and, where appropriate, makes connections between digital and design elements</p> <p style="text-align: right;">25 marks</p>
<p>Excellent skill in researching and recording observations and insights from a variety of sources, relevant to intentions</p> <p>Highly accomplished ability to reflect critically on work and progress.</p> <p>Excellent use of specialist language and appropriate technical vocabulary</p>	<p>Exploration and selection of relevant media, materials and technology is excellent</p> <p>Highly accomplished and sophisticated ability to review and refine ideas as work develops.</p> <p>Excellent communication of ideas through visual and other forms</p>	<p>Excellent development of ideas or concepts, with reference to the brief provided, through focused investigations</p> <p>Analytical and critical understanding demonstrated through highly accomplished and mature referencing of feedback, testing and constraints</p> <p>Perceptive integration of practical and written elements</p>	<p>Excellent realisation of intentions demonstrated through a personal digital response</p> <p>Highly accomplished and mature connections made between digital and design elements</p> <p>Work demonstrates an excellent level of engagement and independence</p>
21-25	21-25	21-25	21-25
<p>Confident skill in researching and recording observations and insights from a variety of sources, relevant to intentions</p> <p>Highly effective ability to reflect critically on work and progress</p> <p>Confident use of specialist language and appropriate technical vocabulary</p>	<p>Confidently explores and selects relevant media, materials and technology</p> <p>Highly effective ability to review and refine ideas as work develops</p> <p>Confident communication of ideas through visual and other forms</p>	<p>Confident development of ideas or concepts, with reference to the brief provided, through focused investigations</p> <p>Analytical and critical understanding confidently demonstrated through thorough and careful referencing of feedback, testing and constraints</p> <p>Highly effective integration of practical and written elements</p>	<p>Confident realisation of intentions demonstrated through a personal digital response</p> <p>Highly effective connections made between digital and design elements</p> <p>Work demonstrates a highly effective level of engagement and independence</p>
16-20	16-20	16-20	16-20

<p>AO1: Research and record ideas, observations and insights relevant to intentions, reflecting critically on work and progress</p> <p>25 marks</p>	<p>Competent skill in researching and recording observations and insights from a variety of sources, relevant to intentions</p> <p>Good ability to reflect critically on work and progress</p> <p>Competent use of specialist language and appropriate technical vocabulary</p>	11–15	<p>Satisfactory skill in researching and recording observations and insights from a variety of sources, relevant to intentions</p> <p>Adequate ability to reflect critically on work and progress</p> <p>Satisfactory use of specialist language and appropriate technical vocabulary</p>	6–10
<p>AO2: Explore and select appropriate media, materials and technology, reviewing and refining ideas as work develops</p> <p>25 marks</p>	<p>Competent exploration and selection of relevant media, materials and technology</p> <p>Good ability to review and refine ideas as work develops</p> <p>Good communication of ideas through visual and other forms</p>	11–15	<p>Adequate exploration and selection of relevant media, materials and technology</p> <p>Satisfactory ability to review and refine ideas as work develops</p> <p>Satisfactory communication of ideas through visual and other forms</p>	6–10
<p>AO3: Develop ideas or concepts through investigations informed by feedback, testing and constraints, demonstrating critical understanding</p> <p>25 marks</p>	<p>Competent development of ideas or concepts, with reference to the brief provided, through focused investigations</p> <p>Good analytical and critical understanding demonstrated through careful referencing of feedback, testing and constraints</p> <p>Good integration of practical and written elements</p>	11–15	<p>Satisfactory development of ideas or concepts, with reference to the brief provided, through focused investigations</p> <p>Adequate analytical and critical understanding demonstrated through some referencing of feedback, testing and constraints</p> <p>Adequate integration of practical and written elements</p>	6–10
<p>AO4: Produce a personal digital response that realises intentions and, where appropriate, makes connections between digital and design elements</p> <p>25 marks</p>	<p>Competent realisation of intentions demonstrated through a personal digital response</p> <p>Good connections made between digital and design elements</p> <p>Work demonstrates a competent level of engagement and independence</p>	11–15	<p>Satisfactory realisation of intentions demonstrated through a personal digital response</p> <p>Adequate connections made between digital and design elements</p> <p>Work demonstrates an adequate level of engagement and independence</p>	6–10

AO1: Research and record ideas, observations and insights relevant to intentions, reflecting critically on work and progress	25 marks	AO2: Explore and select appropriate media, materials and technology, reviewing and refining ideas as work develops	25 marks	AO3: Develop ideas or concepts through investigations informed by feedback, testing and constraints, demonstrating critical understanding	25 marks	AO4: Produce a personal digital response that realises intentions and, where appropriate, makes connections between digital and design elements	25 marks
<p>Limited skill in researching and recording observations and insights from a variety of sources, relevant to intentions</p> <p>Basic ability to reflect critically on work and progress</p> <p>Limited use of specialist language and appropriate technical vocabulary</p>	1-5	<p>Limited exploration and selection of relevant media, materials and technology</p> <p>Basic ability to review and refine ideas as work develops</p> <p>Basic communication of ideas through visual and other forms</p>	1-5	<p>Basic development of ideas or concepts, with reference to the brief provided</p> <p>Limited analytical and critical understanding demonstrated through basic referencing of feedback, testing and constraints</p> <p>Limited integration of practical and written elements</p>	1-5	<p>Limited realisation of intentions demonstrated through a personal digital response</p> <p>Basic connections made between digital and design elements</p> <p>Work demonstrates a basic level of engagement and independence</p>	1-5
No creditable work	0	No creditable work	0	No creditable work	0	No creditable work	0

5 What else you need to know

This section is an overview of other information you need to know about this syllabus. It will help to share the administrative information with your exams officer so they know when you will need their support. Find more information about our administrative processes at www.cambridgeinternational.org/examsofficers

Before you start

Previous study

We recommend that learners starting this course should have studied a Cambridge O Level or Cambridge IGCSE® course in Art & Design or Design & Technology or Computer Studies or the equivalent. Previous study of information technology or an interest in this area would also be beneficial.

Guided learning hours

We design Cambridge International AS & A Level syllabuses based on learners having about 180 guided learning hours for each Cambridge International AS Level and about 360 guided learning hours for a Cambridge International A Level. The number of hours a learner needs to achieve the qualification may vary according to local practice and their previous experience of the subject.

Availability and timetables

You can enter candidates in the June and November exam series. You can view the timetable for your administrative zone at www.cambridgeinternational.org/timetables

Private candidates cannot enter for this syllabus.

Combining with other syllabuses

Candidates can take this syllabus alongside other Cambridge International syllabuses in a single exam series. The only exceptions are:

- syllabuses with the same title at the same level.

Group awards: Cambridge AICE

Cambridge AICE (Advanced International Certificate of Education) is a group award for Cambridge International AS & A Level. It allows schools to offer a broad and balanced curriculum by recognising the achievements of learners who pass examinations in a range of different subjects.

Learn more about Cambridge AICE at www.cambridgeinternational.org/aice

Making entries

Exams officers are responsible for submitting entries to Cambridge International. We encourage them to work closely with you to make sure they enter the right number of candidates for the right combination of syllabus components. Entry option codes and instructions for submitting entries are in the *Cambridge Guide to Making Entries*. Your exams officer has a copy of this guide.

Exam administration

To keep our exams secure, we produce question papers for different areas of the world, known as 'administrative zones'. We allocate all Cambridge schools to one administrative zone determined by their location. Each zone has a specific timetable. Some of our syllabuses offer candidates different assessment options. An entry option code is used to identify the components the candidate will take relevant to the administrative zone and the available assessment options.

Support for exams officers

We know how important exams officers are to the successful running of exams. We provide them with the support they need to make your entries on time. Your exams officer will find this support, and guidance for all other phases of the Cambridge International Exams Cycle, at www.cambridgeinternational.org/examsofficers

Retakes

Candidates can retake Cambridge International AS Level and Cambridge International A Level as many times as they want to. Cambridge International AS & A Levels are linear qualifications so candidates cannot re-sit individual components. Information on retake entries is in the *Cambridge Handbook* at www.cambridgeinternational.org/examsofficers

Equality and inclusion

We have taken great care to avoid bias of any kind in the preparation of this syllabus and related assessment materials. In compliance with the UK Equality Act (2010) we have designed this qualification to avoid any direct and indirect discrimination.

The standard assessment arrangements may present unnecessary barriers for candidates with disabilities or learning difficulties. We can put arrangements in place for these candidates to enable them to access the assessments and receive recognition of their attainment. We do not agree access arrangements if they give candidates an unfair advantage over others or if they compromise the standards being assessed.

Candidates who cannot access the assessment of any component may be able to receive an award based on the parts of the assessment they have completed.

Information on access arrangements is in the *Cambridge Handbook* at www.cambridgeinternational.org/examsofficers

Language

This syllabus and the related assessment materials are available in English only.

After the exam

Grading and reporting

Grades A*, A, B, C, D or E indicate the standard a candidate achieved at Cambridge International A Level, with A* being the highest grade.

Grades a, b, c, d or e indicate the standard a candidate achieved at Cambridge International AS Level, with 'a' being the highest grade.

'Ungraded' means that the candidate's performance did not meet the standard required for the lowest grade (E or e). 'Ungraded' is reported on the statement of results but not on the certificate. In specific circumstances your candidates may see one of the following letters on their statement of results:

- Q (pending)
- X (no result)
- Y (to be issued)

These letters do not appear on the certificate.

If a candidate takes a Cambridge International A Level and fails to achieve grade E or higher, a Cambridge International AS Level grade will be awarded if both of the following apply:

- the components taken for the Cambridge International A Level by the candidate in that series included all the components making up a Cambridge International AS Level
- the candidate's performance on the AS Level components was sufficient to merit the award of a Cambridge International AS Level grade.

On the statement of results and certificates, Cambridge International AS & A Levels are shown as General Certificates of Education, GCE Advanced Subsidiary Level (GCE AS Level) and GCE Advanced Level (GCE A Level).

'Cambridge International A Levels are the 'gold standard' qualification. They are based on rigorous, academic syllabuses that are accessible to students from a wide range of abilities yet have the capacity to stretch our most able.'

Mark Vella, Director of Studies, Auckland Grammar School, New Zealand

How students, teachers and higher education can use the grades

Cambridge International A Level

Assessment at Cambridge International A Level has two purposes.

- To measure learning and achievement.
The assessment:
 - confirms achievement and performance in relation to the knowledge, understanding and skills specified in the syllabus, to the levels described in the grade descriptions.
- To show likely future success.
The outcomes:
 - help predict which students are well prepared for a particular course or career and/or which students are more likely to be successful
 - help students choose the most suitable course or career.

Cambridge International AS Level

Assessment at Cambridge International AS Level has two purposes.

- To measure learning and achievement.
The assessment:
 - confirms achievement and performance in relation to the knowledge, understanding and skills specified in the syllabus.
- To show likely future success.
The outcomes:
 - help predict which students are well prepared for a particular course or career and/or which students are more likely to be successful
 - help students choose the most suitable course or career
 - help decide whether students part way through a Cambridge International A Level course are making enough progress to continue
 - guide teaching and learning in the next stages of the Cambridge International A Level course.

Grade descriptions

Grade descriptions are provided to give an indication of the standards of achievement candidates awarded particular grades are likely to show. Weakness in one aspect of the examination may be balanced by a better performance in some other aspect.

Grade descriptions for Cambridge International A Level Digital Media & Design will be published after the first assessment of the A Level in 2020. Find more information at www.cambridgeinternational.org/alevel

'While studying Cambridge IGCSE and Cambridge International A Levels, students broaden their horizons through a global perspective and develop a lasting passion for learning.'

Zhai Xiaoning, Deputy Principal, The High School Affiliated to Renmin University of China

Cambridge Assessment International Education
1 Hills Road, Cambridge, CB1 2EU, United Kingdom
Tel: +44 (0)1223 553554 Fax: +44 (0)1223 553558
Email: info@cambridgeinternational.org www.cambridgeinternational.org

© IGCSE is a registered trademark.

Copyright © UCLES September 2017