



MALAYSIA

16 Options Information Booklet

OUR PURPOSE

To educate the youth of the world to take their productive place as leaders in the global community.

OUR CORE VALUES

Respecting and Caring for Each Other Being Dedicated to a Culture of Excellence Openness in Communication Acting with Integrity Being Passionate in What We Do Creating Enjoyable Environment

OUR VISION

Nexus International School will be an internationally minded learning community that nurtures and supports every child's emotional, physical, creative and intellectual needs in order that they can achieve academic success and become globally responsible citizens. We will accomplish this by celebrating diversity and challenging minds.

OUR PROMISE

To foster the gifts and talents that reside in everybody through careful mentorship and guidance based on respect. To provide a nurturing environment for these talents; one that is innovative, progressive and grounded in trust, compassion and respect.

Contents

Opening Message from the Phase Leader for IB Years	
General Information	5
IBDP Core	7
Residentials	8
Support for IBDP Learners	9
Choosing Subjects	10
Group 1: Language A	12
Group 2: Language B	13
Group 3: Individuals and Societies	
Group 4: Sciences	
Group 5: Mathematics	18
Group 6: Arts and Electives	
ALUMNI UNIVERSITY DESTINATIONS 2013-2016	

Opening Message from the Phase Leader for IB Years

It gives me great pleasure to introduce you to the International Baccalaureate Diploma Programme (IBDP) at Nexus International School Malaysia. I hope that you find the information in this booklet useful in making the best subject choices for your diploma.

The fact that you are reading this probably means that you have made one very important choice already and that is to choose the IBDP over other post-16 systems of education. It is my firm belief that the IBDP is the highest quality programme available for senior international learners. The academic rigour, breadth of study, emphasis on critical thinking, internationalism and aim of developing the whole individual make it an unmatched and unique qualification.

The value and popularity of the IBDP has not been lost on many schools who have chosen to adopt it in recent years and it's reputation continues to grow. In particular, the growth in the Asia-Pacific region has been phenomenal. At Nexus we are confident that we are offering an excellent programme, which has been authorised by the IB organisation. We have highly qualified, experienced and enthusiastic teachers, who have undergone training in the IBDP according to the requirements demanded of the IB organisation, and a carefully planned curriculum across all subjects. We have a wide range of subjects on offer, which should ensure we can provide an appropriate course of study for all. In keeping with the Nexus approach to learning we utilise the latest in technological innovations and educational thinking in a supportive environment for our learners.

Personally, I am excited and honoured to be helping to develop the IBDP at Nexus International School and look forward to working together with all our new and existing learners.

Please do not hesitate to contact us if there is anything you wish to discuss, or if you require more information about the IBDP programme at Nexus International School Malaysia.

Assistant Head of Secondary School (Phase Leader - IB Years)

IB Mission Statement

The IBDP aims to develop inquiring, knowledgeable and caring young people who help to create a better and more peaceful world through intercultural understanding and respect.

To this end, the organisation works with schools, governments and international organisations to develop challenging programmes of international education and rigorous assessment.

These programmes encourage learners across the world to become active, compassionate and life long learners who understand that other people, with their differences, can also be right.

The IB Learner Profile

The IBDP emphasises attitudes and crosscurricular skills that the learners will be encouraged to develop over the two years of study through all the components.

We ensure that learners have opportunities both in and out of the classroom to put them into practice.



Approaches to Learning (ATLs)

ATL are deliberate strategies, skills and attitudes that permeate the IB teaching and learning environment.

ATL supports the IB belief that a large influence on a student's education is not only what you learn but also how you learn.





The IBDP Circle is designed to offer the learner breadth of study, whilst still allowing for specialisation in areas in which they are interested.

Learners are required to choose one subject from each of the subject groups. They may elect to take another subject instead of an Arts if their chosen career path demands this eg. medicine requires 2 sciences. Learners must select three subjects at higher level (HL) and three at standard level (SL). Each subject is graded from 7 (highest) to 1 (lowest).

At the core of the circle are the programme's three compulsory elements: Theory of Knowledge (TOK), the Extended Essay (EE) and Creativity, Activity, Service (CAS). There are three bonus points on offer for the TOK and Extended Essay. The maximum points score for a learner is therefore 45.

The IB Programme also offers alternative, individualised pathways.

Learners may choose not to enroll in the **Full** Diploma Programme, and instead take only particular Diploma subject **Courses**, which may, or may not include participation in the core components. A learner may take as many, or as few courses as they wish, after consultation with the IB Phase Leader. The award for each of these courses is not therefore the full IBDP, but a series of scores from one to seven for each subject course.

Many good universities around the world recognise learners' achievements in individual courses and in the core components. Many universities give credit for individual courses and also the Extended Essay and Theory of Knowledge courses.



IBDP Core

Creativity, Activity, Service (CAS)

CAS is the part of the IBDP that helps develop the whole individual, promoting compassionate thinking and responsibility for our society. Creativity is a skill or hobby – ideally something new or if an existing hobby it should offer some new challenge. Activity is usually a sport but could involve a physical activity such as rock climbing for example. Service is often seen as the most important part of CAS as this provides opportunities for significant personal growth and could involve an activity such as visiting hospitals, or interacting with less advantaged members of society. No points are awarded for the CAS programme, but a learner who does not complete it satisfactorily is not eligible to be awarded the IB Diploma.

Theory of Knowledge (TOK)

Theory of Knowledge stresses critical thinking skills and questioning. It is concerned with the nature of knowledge, how we know what we know and different types of knowledge. Through reflecting on different ways of thinking, TOK is a good way for learners to consider and challenge their own pre-conceived ideas. It is also an excellent vehicle to encourage cross-curricular links by comparing differences and commonalities in different areas of knowledge.

The Extended Essay (EE)

A 4000 word essay undertaken by the learners under the supervision of a teacher. Such learning relates to the 'independent learner' referred to in the mission statement and it is intended that the learner will pursue an area of interest to them. It promotes independent research skills and is often a good topic for learners to bring up at university interviews where institutions are looking for 'something extra'.

The grade for the EE is combined with the grade for TOK and learners can gain up to three bonus points.



Induction Residential Weekend

An IBDP learner is taught to move beyond the given norms, to confront boundaries and undertake challenges that will push their learning to new heights. Within the international context of the IBDP, Nexus learners will be immersed in active learning equipping them to step beyond the classroom.

With the aim of building a solid base for learners to develop those qualities and move into, or beyond, their first year of the IBDP, all Year 12 learners attend the IBDP Induction Residential at the very beginning of the new academic year in August. During this residential experience, learners will be involved in team building activities with Year 13 learners providing various perspectives on how best to thrive in the programme for the incoming group. Subject teachers, key members of the IB Leadership Team, and members of the Secondary Leadership Team are involved to help and advise all learners throughout the weekend.

CAS Residential Trip

In Year 12 learners get an oppportunity to apply their skills in an authentic context. The CAS trip covers all three aspects of CAS - Creativity, Action and Service. The trip is planned to take them out of their comfort zone, it demands real team work and presents the learners with real life challenges. The trip is compulsory and paid for by the school.



Support for IBDP Learners

A number of support mechanisms to assist IBDP learners with their studies are offered. Whilst Nexus is not selective in its admissions policy only those learners who are capable of benefitting from the programme will be offered a place.

Mentoring

A programme of 1:1 mentoring for learners provides individual support for our learners in a manner that affords the development of independence, self-efficacy and wellbeing. The mentoring programme involves several strands, but first and foremost, every member of staff (not just teachers) are mentors to the young people in our care who need additional support.

Social and Emotional Guidance

A full-time trained counselor assists learners develop the life skills necessary to cope with the challenges they may face. Learners are welcome to drop in to the Counsellor's office for a chat or make an appointment. Confidentiality is respected and learners can expect that their issues will be dealt with in a non-judgmental, professional and respectful manner.

Study Skills

Highly developed study skills are the key to achieving success in the IBDP therefore Nexus emphasizes the teaching of these both within lessons and during tutor time. Topics such as referencing, research, time management and effective note-taking will be addressed.

Inclusion and other Provision

The Inclusion department assists learners who are second language English speakers through in-class support or through sessions outside of subject-specific lessons. Diagnostic tests can be conducted to access other types of learning difficulties and support is offered as necessary. Learners can follow a tailor made pathway of certificates leading to a Partial Diploma.

HE Guidance and Careers Counselling

A Careers and Higher Education Counsellor assists learners seeking entrance to further education institutions. This takes the form of inviting representatives of universities to the school in order to meet learners, offering advice on a suitable course of study or providing guidance on the process of applying to university and how to source financial assistance.



Choosing Subjects

Some learners have a very fixed idea of what they want to do after school whilst others are not so sure. It is important to make sure that subject choice does not prevent a learner from pursuing a desired course or career. It is also important not to become too fixated on going down one particular path at the exclusion of others. Plans often change and traditional career paths are becoming increasingly eroded in the fast-changing and technological environment in which today's young people will seek employment. It is important to be flexible whilst keeping options open. The IBDP circle is designed to help learners do this. A good all-round education, reflecting strengths and weaknesses, is an effective touchstone when making choices.

Whilst it may be possible to change the combination of courses early on in the year, it is better to get the combination correct from the beginning. Learners need to:

- Be honest about their capabilities. A Higher Level course in a subject for which they do not have an aptitude will be very challenging. Some subjects have a minimum entry level.
- Choose subjects which they enjoy and have an interest in. We all work better when doing something we like.
- Base their choices on the facts, not on hearsay. Do some research or ask the Careers + Higher Education Counsellor what the entry requirements for a particular university course are.

Group	Higher Level	Standard Level
1	Language A: English Language + Literature; Malay Literature	Language A: English Language + Literature; Malay Literature or Self-taught
2	Language B: Mandarin; English; French; Spanish	Language B: Malay; Mandarin; French; Spanish; English* or Ab Initio; French and Spanish
3	Geography; History; Economics; Business Management; ITGS; Psychology	Geography; History; Economics; Business Management; ITGS; Psychology
4	Biology; Chemistry; Physics; Sports, Exercise and Health Science (SEHS)	Biology; Chemistry; Physics; Sports, Exercise and Health Science (SEHS)
5	Mathematics	Mathematics; Mathematical Studies
6	Visual Arts; Music; Film; Theatre Arts; or an additional Science or Humanities subject	Visual Arts; Music; Theatre Arts; Film; or an additional Science or Humanities subject

Availability of a subject is dependent on number of learners who choose it.

Group 2 additional information

Engilsh B can only be taken by a learner who studies a language other than English in Group 1 Malay B must be sat in the November examination schedule

Subject Information

NIS

CON

Group 1: Language A

Group 1 languages require near-native level of written and spoken skills.

English Language + Literature: HL/SL The Language + Literature course covers:

- Language in Cultural Context
- Language and Mass Communication
- Literature texts and contexts
- Literature critical study.

Topics and texts studied are varied and interesting in order to encourage learners to think critically about texts, audience and purpose.

The course is designed to develop a range of skills: close reading, textual analysis, creative writing, formal writing, along with presentation and speaking skills.

Malay Literature: HL/SL

The Literature course covers:

- Part 1: Works in translation
- Part 2: Detailed study
- Part 3: Literary genres
- Part 4: Options (in which works are freely chosen)

The course is designed to develop a range of literary skills such as textual analysis, commentary writing and comparative essay writing along with presentations skills. It provides an oppurtunities for learners to develop their analytical skills in the malay language as well as an appreciation of literature. A range of texts are studied in order to encourage learners to think critically about audiences and purposes.

Self-taught Languages: SL only

At Nexus International School our learners speak a wide variety of languages and it is not feasible to provide staff to teach each one. Under these circumstances it may be possible to arrange a self-taught option for a learner. In this case it is the responsibility of the parents, in consultation with the school, to help to arrange a tutor (at their own cost) who would either come into school, or who the learner would interact with online. A member of the Nexus language department would monitors the progress of each learner on such a scheme.

Group 2: Language B

A grade C at IGCSE or its equivalent is a course prerequisite.

Malay, Mandarin, French, Spanish and English: HL/SL

The Language B course covers:

- Communications and media
- World issues
- Social relationships

2 of the following Optional Topics are also studied:

- Cultural diversity
- Customs and traditions
- Health
- Sport and pastimes
- Science and technology

HL learners will additionally study in-depth 2 literary texts:

At both HL and SL, learners will be investigating the cultural aspects and the language associated with their chosen language. Learners in both cases will reach a language level where they can communicate in their chosen language with native speakers on a range of topics.

Ab Initio

No previous knowledge or extremely limited knowledge of the language is required.

French and Spanish: SL only

The Ab Initio course covers:

- Individual and society
- Leisure and work
- Urban and rural development

The course is designed so that the topics covered are both interesting and varied in order for the learner to develop a wide and rich vocabulary and therefore be able to communicate with native speakers on a broad range of subjects.



Group 3: Individuals and Societies

Business Management: HL/SL

The Business Management course covers:

- Business organisation and environment
- Human resources
- Accounts and finance
- Marketing
- Operations management

The course is designed to develop learners' knowledge and understanding of business management theories, as well as their ability to apply a range of tools and techniques. Learners are required to analyse, discuss and evaluate business activities at local, national and international levels. Learners explore a range of organizations from all sectors, as well as the socio-cultural and economic contexts in which those organizations operate.

Economics: HL/SL

The Economics course covers:

- Microeconomics
- Macroeconomics
- International economics
- Development economics

The course encourages learners to develop international perspectives to foster a concern for global issues, and to raise learners' awareness of their own responsibilities at a local, national and international level. Learners also develop values and attitudes that will enable them to achieve a degree of personal commitment in trying to resolve these issues whilst appreciating shared responsibility as citizens of an increasingly interdependent world.

Geography: HL/SL

The Geography core course covers:

- Population distribution changing population
- Global climate vulnerability and resilience
- Global resource consumption and security

There is a choice from 7 optional topics plus an HL extension.

The course is firmly grounded in the real world and encourages learners to focus on the interactions between individuals, societies and the physical environment in both time and space. Learners identify trends and patterns in these interactions and examine the processes behind them. They investigate the way that people adapt and respond to change and evaluate management strategies associated with such change.





History: HL/SL

The History core course covers:

- Authoritarian states
- Independence movements
- Rights and protests

In addition, there are extension topics for HL learners.

The course is a world history course based on a comparative and multi-perspective approach to history. Learners study different types of history, including political, economic, social and cultural providing a balance of structure and flexibility. Learners are encouraged to think historically and to develop historical skills as well as gaining factual knowledge. They develop the skills of critical thinking, and an understanding of multiple interpretations of history. Learners engage in a challenging and demanding critical exploration of the past.

Psychology: HL/SL The Psychology core course covers:

- Sociocultural level of analysis
- Cognitive level of analysis
- Biological level of analysis

In addition, there is a choice from four optional topics and HL extension topic.

The course examines the interaction of biological, cognitive and sociocultural influences on human behaviour, thereby adopting an integrative approach. Learners develop an understanding of how psychological knowledge is generated, developed and applied which enables them to achieve a greater understanding of themselves and appreciate the diversity of human behaviour. The ethical concerns raised by the methodology and application of psychological research are also key considerations.

Information Technology in a Global Society (ITGS): HL/SL The ITGS course covers:

- The Environment and ICT
- Networks and internet
- Robotics, artificial intelligence and expert systems

The course is the study of the impacts of information technology (IT) on individuals and society. Learners to make informed judgments and decisions about the use of IT within social contexts. They explore the use of ICT within government, how it affects the environment and how hardware connects computers within organisations.



Group 4: Sciences

Group 4 SL subjects require at least a grade C at IGCSE. HL require a grade B or more.

Biology: HL/SL

The Biology course covers:

- Cell biology
- Molecular biology
- Genetics
- Ecology
- Evolution
- Human physiology
- Plant physiology

The course develops learners' deeper understanding of the structure and function of the body, its design through genetics and evolution and how all species interdepend to create the living world. The course will enable learners to appreciate how current scientific knowledge has developed in a global context and to develop the skills required for scientific investigation.

Chemistry: HL/SL

The Chemistry course covers:

- Quantitative chemistry
- Atomic structure & bonding
- Energetics, kinetics & equilibria
- Oxidation & reduction processes
- Organic chemistry
- Biochemistry & medicinal chemistry

The course develops learners' deeper understanding of chemical processes, enabling them to explain many different chemical interactions. The course will enable learners to appreciate how current scientific knowledge has developed in a global context and to develop the skills required for further scientific progress.





Physics: HL/SL

The Physics course covers:

- Mechanics
- Thermal physics
- Waves
- Electricity and magnetism
- Circular motion and gravitation
- Atomic, nuclear and particle physics
- Energy production

The course develops learners' appreciation of the universe from the smallest particles to the vast distances between galaxies. They will examine classical physics and how ideas and theories have developed throughout history and deepened understanding of the world. Learners will use and develop the same scientific processes as those carried out by scientists of the past, and develop their ability to theorise about phenomena.

Sports, Exercise and Health Science (SEHS): HL/SL

The SEHS course covers:

- Anatomy
- Exercise physiology
- Energy systems
- Movement analysis
- Skill in sport
- Measurement and evaluation of human performance
- Psychology of sport
- Physical activity and health
- Nutrition for sport, exercise, and health

The course incorporates the traditional disciplines of Anatomy, Physiology, Biomechanics, Psychology and Nutrition which are studied in the context of Sport, Exercise and Health. Learners study a range of core and option topics. They undertake practical (experimental) investigations in both laboratory and field settings. This provides an opportunity to acquire the knowledge and understanding necessary to apply scientific principles and critically analyse human performance. Where relevant, the course addresses issues of internationalism and ethics by considering Sport, Exercise and Health relative to the individual and in a global context.





Group 5: Mathematics

A grade A at IGCSE or its equivalent is a course prerequisite for HL and a grade B is a prerequisite for SL.

Mathematics: HL/SL

The Mathematics course covers:

- Algebra
- Functions and equations
- Circular functions and trigonometry
- Vectors
- Statistics and probability
- Calculus
- HL Option topic (usually Further Calculus or Further Statistics)

The course provides learners with a strong background in mathematics. The focus is on developing important mathematical concepts in a comprehensible, coherent way. Learners will be encouraged to apply their mathematical knowledge to solve realistic problems in a variety of meaningful contexts.

The higher level course requires a higher degree of mathematical rigour. Development of each topic will feature justification and proof of results. Learners embarking on this course should epect to develop insight into mathematical form and structure, and should be intellectually equipped to appreciate the links between concepts in different topis areas.

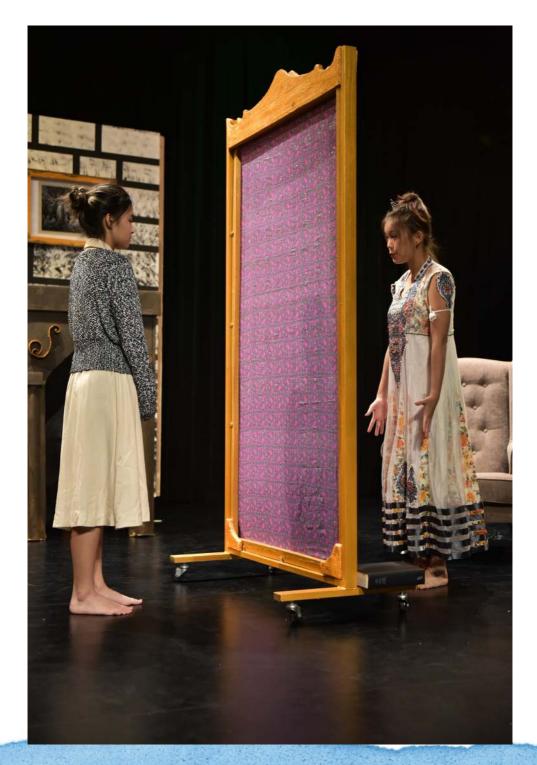
Mathematical Studies SL only

The Mathematics Studies course covers:

- Number and algebra
- Functions
- Geometry and trigonometry
- Sets, logic and probability
- Statistics
- Introductory differential calculus

The course is designed to build confidence and encourage an appreciation of mathematics. The syllabus focuses on important mathematical topics that are interconnected. It is organized and structured with the following tenets in mind: placing more emphasis on learner understanding of fundamental concepts than on symbolic manipulation and complex manipulative skills; giving greater emphasis to developing learners' mathematical reasoning rather than performing routine operations; solving mathematical problems embedded in a wide range of contexts; using the calculator effectively.





Group 6: Arts and Electives

Film: HL/SL

The Film course develops skills in:

- Directing
- Cinematography
- Editing
- Sound recording
- Screenwriting
- Textual analysis
- Film theory and history
- Becoming an active spectator of film

The course allows learners to develop their own interests in Global Cinema, focusing on film cultures from around the world. In addition learners explore film styles and movements from the Silent era, German Expressionism, Film Noir, Italian Neo Realism, French New Wave and Iranian neo-realist film. The central focus of the course is a practical element that includes the planning, shooting and editing of a seven-minute film individually or as part of a group.

Music: HL/SL

Music requires at least a grade 6 or above in a musical instrument or voice.

The Music course develops skills in:

- Solo performance
- Group performance
- Composing
- Improvising
- Music technology
- Listening 14th century to the present day of music for all around the world
- Musical links investigation the comparison of two pieces of music you like

Involving aspects of the composition, performance and critical analysis of music, the course exposes students to forms, styles and functions of music from a wide range of historical and socio-cultural contexts. Students create, participate in, and reflect upon music from their own background and those of others. They develop practical and communicative skills which provide them with the opportunity to engage in music for further study, as well as for lifetime enjoyment.



Theatre Arts: HL/SL

The Theatre Arts course develops skills in:

- World theatre traditions
- Directing
- Devising
- Script analysis
- Reviewing live theatre performance
- A solo performance
- Theatre processes

The course gives learners an in-depth understanding of a range of many different theatre practices from around the world. Learners direct others in performance, as well as develop presentation and performance skills. The course also helps learners improve their communication skills through the study of voice and movement.

Visual Arts: HL/SL

The Visual Arts course develops skills in:

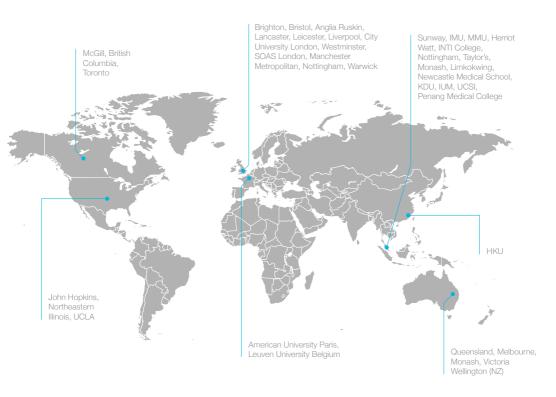
- Theoretical Practice: Investigating visual art in context, as well as ways of making and presenting art.
- Art-making Practice: Create art recording processes and techniques. Art making includes drawing, painting, printing, graphics, sculpture, designed objects, site specific artwork, textiles, time-based and sequential art, Lens media and digital/screen based artwork.
- Curatorial Practice: Develop informed responses to exhibition work whilst selecting and presenting your own resolved works.
- Visual Arts Journal: Use a journal to record all aspects of your artmaking journey, including experiments with media, research, reflections, observations and personal responses.

The course develops learners' analytical skills, problem-solving and divergent thinking, while working towards technical proficiency and confidence as art-makers. In addition to exploring and comparing visual arts from different perspectives and in different contexts, learners are expected to engage in, experiment with and critically reflect upon a wide range of contemporary practices and media.



ALUMNI UNIVERSITY DESTINATIONS 2013-2016

Year 13 learners have set a high standard and we are justifiably proud of their achievements. Most pleasing of all, however, is that one doesn't need to spend long in our senior learners' company to realise that they embody the quality that we emphasise above all others at Nexus: a growth mindset – a frame of mind that welcomes challenge, values effort, persists in the face of obstacles and loves learning.



Courses Studied:

Medicine, Sociology, Business Management & Finance, Marine Biology, Philosophy, Politics & Economics, English Language and Creative Writing, Politics and International Relations, International Relations and World Philosophy, Speech Language and Theraphy, Computer Science, Law, Art, Finance and Accounting, Anthropology, Film , Economics, Urban Planning & Political Science, Material Science and Engineering, Psychology, Business, International Business, Aerospace, Interior Design, Business Administration, Environmental Science, Chemical Engineering, Mass Communications, Real Estate Finance, Game Art Design, International Studies.

Notes:



