International Baccalaureate
Diploma Programme Subject Brief

Individuals and societies:
Information technology in a global society – Standard level

First assessments 2012 – Last assessments 2019

The IB Diploma Programme (DP) is a rigorous, academically challenging and balanced programme of education designed to prepare students aged 16 to 19 for success at university and life beyond. The DP aims to encourage students to be knowledgeable, inquiring, caring and compassionate, and to develop intercultural understanding, open-mindedness and the attitudes necessary to respect and evaluate a range of viewpoints.

To ensure both breadth and depth of knowledge and understanding, students must choose at least one subject from five groups: 1) their best language, 2) additional language(s), 3) social sciences, 4) experimental sciences, and 5) mathematics. Students may choose either an arts subject from group 6, or a second subject from groups 1 to 5. At least three and not more than four subjects are taken at higher level (240 recommended teaching hours), while the remaining are taken at standard level (150 recommended teaching hours). In addition, three core elements—the extended essay, theory of knowledge and creativity, action, service—are compulsory and central to the philosophy of the programme.

These IB DP subject briefs illustrate four key course components.
I. Course description and aims
II. Curriculum model overview
III. Assessment model
IV. Sample questions

I. Course description and aims

The IB DP information technology in a global society (ITGS) course is the study and evaluation of the impacts of information technology (IT) on individuals and society. It explores the advantages and disadvantages of the access and use of digitized information at the local and global level. ITGS provides a framework for the student to make informed judgments and decisions about the use of IT within social contexts.

The aims of the ITGS standard level courses are to:

- enable the student to evaluate social and ethical considerations arising from the widespread use of IT by individuals, families, communities, organizations and societies at the local and global level
- develop the student's understanding of the capabilities of current and emerging IT systems and to evaluate their impact on a range of stakeholders
- enable students to apply their knowledge of existing IT systems to various scenarios and to make informed judgments about the effects of IT developments on them
- encourage students to use their knowledge of IT systems and practical IT skills to justify IT solutions for a specified client or end-user.

II. Curriculum model overview

Component	Recommended teaching hours
Strand 1: Social and ethical significance • Reliability and integrity • Security • Privacy and anonymity • Intellectual property • Authenticity • The digital divide and equality of access • Surveillance • Globalization and cultural diversity • Policies • Standards and protocols • People and machines • Digital citizenship	40
Strand 2: Application to specified scenarios • Business and employment • Education and training • Environment • Health • Home and leisure • Politics and government	40

Strand 3: IT systems • Hardware • Software • Networks • Internet • Personal and public communications • Multimedia/digital media • Databases • Spreadsheets, modelling and simulations • Introduction to project management	40	
The project (practical application of IT skills) The application of skills and knowledge to develop an original IT product for a specified client.	30	

Assessment at a glance

Type of assessment	Format of assessment	Time (hours)	Weighting of final grade (%)
External		3	70
Paper 1	Three structured responses	1.75	40
Paper 2	Written response to previously unseen article	1.25	30
Internal		30	30
Written report	Development of an original IT product for a specified client		

III. Assessment model

Having followed the ITGS standard level course, students will be expected to demonstrate the following:

Knowledge and understanding of specified content
  • Demonstrate an awareness of IT applications and developments in specified scenarios
  • Demonstrate an awareness of the social and ethical significance of specified IT applications and developments
  • Demonstrate technical knowledge of ITGS terminology, concepts and tools
  • Demonstrate technical knowledge of IT systems

Application and analysis
  • Explain the impacts of IT applications and developments in specified scenarios
  • Analyse the social and ethical significance of specified IT applications and developments
  • Transfer IT knowledge and make connections between specific scenarios

Synthesis and evaluation
  • Evaluate local and global impacts of specified IT developments through individually researched studies
  • Evaluate a solution involving IT to a specified problem using knowledge of IT systems
  • Discuss the social and ethical implications of specified IT policies and developments

Use of ITGS skills
  • Demonstrate evidence of project management in the development of a well-organized product to resolve a specific issue
  • Use IT tools and the product development life cycle (PDLC) to create an original product in consultation with a client
  • Demonstrate evidence of the use of appropriate techniques to develop an original IT product.

IV. Sample questions

Questions based on stimulus material

  • Describe the relationship between the server and a client in a network.
  • A company is based at various geographical locations. The senior managing team is considering the use of web-based P2P networking in order to make business-related files available to its staff. To what extent would this be an effective way to share its business data?
  • Describe the relationship of one primary stakeholder to the IT system.
  • Evaluate the impact of the social/ethical issues on the relevant stakeholders.