All Pamoja courses are written by experienced subject matter experts and integrate the principles of TOK and the approaches to learning of the IB learner profile. This course has been authorised by the International Baccalaureate (IB).

**Units**

**Unit 1: Course Overview**
1:1 - Getting Started
1:2 - Introducing Information Technology in a Global Society
1:3 - Assessment and Tools

**Unit 2: Introduction to ITGS**
2:1 - Information Literacy and ITGS Articles
2:2 - Ethical Issues, Mind Maps and Meeting Your Teacher

**Unit 3: Networks**
3:1 - Introduction to Computer Networks
3:2 - What Does a Network Look Like?
3:3 - Computers and Computer Networks
4:1 - The Buzzword - Cloud Computing
4:2 - Code of Ethics and Professional Conduct (ACM)
4:3 - Network Security and Monitoring: Tools and Technologies

**Unit 4: Internet**
5:1 - Has the Internet Changed the Way We Live?
5:2 - Jargonbuster - Internet Fundamentals
5:3 - Search Engines - How Do They Work?
5:4 - Reflective Writing
6:1 - Web 2.0 and the Interactive / Collaborative Environment
6:2 - Digital Convergence - IT Everywhere
6:3 - Jargonbuster - Internet Communication
6:4 - End of Unit Quiz

**Unit 5: Hardware and Software**
7:1 - Introduction to Computer Hardware
7:2 - Jargonbuster - Computer Hardware
7:3 - Creating the Perfect Computer
7:4 - Introduction to Paper 2
8:1 - Software: The Ghost in Your Machine
8:2 - Software Licensing
8:3 - Open Source vs. Commercial Software
8:4 - Introduction to Paper 1
8:5 - Self and Peer Evaluation
8:6 - Term Report (Self Reflection)

Unit 6: Business and Employment

9:1 - IT and Traditional Business
9:2 - How Technology has Changed Business
9:3 - Technology and Banking
9:4 - Technology in Hotels, Supermarkets and Travel Agencies
10:1 - Online Business and E-commerce
10:2 - Introduction to E-money
11:1 - Teleworking
11:2 - Workplace Monitoring
11:3 - Paper 2 Exam Assignment
12:1 - Transportation Business and Technology
12:2 - Package Tracking
12:3 - Traffic Control Systems
12:4 - Paper 1 Exam Assignment

Unit 7: Revision and Semester Test

13:1 - Revision - Paper 1
13:2 - Exam - Paper 1
13:3 - Exam - Paper 2
14:1 - Semester 1: Final Reflections
14:2 - Semester 1: Study and Catch Up Plan

Unit 8: Spreadsheets

15:1 - What are Spreadsheets?
15:2 - Formatting and Presentation
15:3 - Sorting, Filtering and Replicating Data
15:4 - Types of Charts
15:5 - Term 2 Teacher Written Report
16:1 - Functions and Formulas
16:2 - Data Validation and Verification
16:3 - Modelling 'What-if' Functions
16:4 - End of Unit Exam

Unit 9: Databases

17:1 - Introduction to Databases and DBMS
17:2 - Flat-file and Relational Databases
17:3 - Basic Database Operations and Uses
18:1 - Data Validation and Verification
18:2 - Queries
18:3 - Forms and Reports
18:4 - Macros and Mail Merge
18:5 - Week 18 - Database Q & A
19:1 - Data and Database Concerns
19:2 - Data Mining and Matching
19:3 - End of Unit Exam

Unit 10: Modelling and Simulations

20:1 - Computer Models
20:2 - Problems with Models
20:3 - Visualization of Data
20:4 - 3D Printing
21:1 - Computer Simulation
21:2 - Virtual and Augmented Reality
21:3 - Computer Games
21:4 - End of Unit Exam-2
**Unit 11: IA and Project Management**

22:1 - What is the ITGS IA Project?
22:2 - What does an IA Project Look Like?
22:3 - Introduction to Project Spotlight Discussions
22:4 - Introduction to the Internal Assessment Project
23:1 - Understanding the Project Development Life Cycle
23:2 - Project Management: Practical Techniques
23:3 - Understanding the IA Project: Criteria A and B
24:1 - Understanding the IA Project: Criteria C and D
24:2 - Understanding the IA Project: Criterion E and F
24:3 - Understanding the IA Project: Criterion G
24:4 - Preliminary Project Proposal Approval
24:5 - Demonstrating Your Product

**Unit 12: Health**

25:1 - Introduction to Health
25:2 - Telesurgery
25:3 - Technologies for People with Disabilities
25:4 - Case Study: Stephen Hawking
25:5 - Week 23 AI Criteria A
25:6 - Term Report (Self Reflection)
26:1 - What are Electronic Health Records?
26:2 - Telemedicine
26:3 - Expert Systems and E-Prescriptions
26:4 - Healthcare Administration and Technology
26:5 - IA Criterion A - Consultation with the Client
26:6 - IA Criterion A - The Investigation
27:1 - Medical Research
27:2 - Human Genome Project
27:3 - Patient Rehabilitation
28:1 - Psychological Considerations
28:2 - Physical Considerations
28:3 - IA Criterion B - Analysis
28:4 - End of Unit Exam
28:5 - IA: Criterion B

**Unit 13: Multimedia and Digital Media (1)**

29:1 - Introduction to Multimedia and Digital Media
29:2 - Impact of Digital Publication and Broadcast Media
29:3 - End of Year Exam Review
30:1 - How Trustworthy are Online Publication Sources?
30:2 - Digital Piracy
30:3 - Digital Rights Management

**Unit 14: End of Year Revision and Exam**

31:1 - Overview of End of Year Exams
31:2 - Command Terms
### Unit 15: Multimedia and Digital Media (2)

- 31:1 - Overview of End of Year Exams
- 31:2 - Command Terms

### Year 2

#### Unit 1: Government and Politics

- 34:1 - Introduction to Government and Politics
- 34:2 - IT and the Political Process
- 34:3 - E-voting in the News
- 34:4 - Mind Map: Politics and Government
- 35:1 - Government Websites
- 35:2 - Bookmarking: Online Campaign
- 35:3 - Design an Online Campaign: Part 1 of 3
- 35:4 - Project Spotlight
- 36:1 - Government Databases
- 36:2 - Mind Map: Politics and Government
- 36:3 - Design an Online Campaign: Part 2 of 3
- 37:1 - Internet Censorship
- 37:2 - Internet Censorship and Freedom of Speech
- 37:3 - Design an Online Campaign: Part 3 of 3
- 37:4 - Exam Practice - Paper 1
- 38:1 - Surveillance Technology
- 38:2 - Mind Map: Politics and Government
- 39:1 - Surveillance and Privacy
- 39:2 - Mind Map: Politics and Government
- 39:3 - Wiki: Politics and Government Review
- 39:4 - Past Paper Journal Reflection
- 40:1 - Cyber Warfare
- 40:2 - Jargonbuster: Politics and Government
- 40:3 - Exam Practice: Politics and Government Paper 2
- 40:4 - Mind Map: Politics and Government

#### Unit 2: Environment

- 41:1 - Introduction to Environment
- 41:2 - Data Logging and Sensors
- 41:3 - Project Spotlight-3
- 41:4 - Term Report (Self Reflection)

#### Unit 3: IA First Full Draft

- 42:1 - IA Folder Requirement
- 42:2 - First Full IA Folder Submission

#### Unit 4: Environment – Part 2

- 43:1 - Data Representation
- 43:2 - Modelling and Simulations
- 43:3 - Exam Practice Paper 2: Data Logging and GPS
- 44:1 - Global Warming and Waste
- 44:2 - Using an Environmental Simulation Part 2 of 3
- 45:1 - Mapping Tools and Geocaching
- 45:2 - Using an Environmental Simulation Part 3 of 3
- 45:3 - Exam Paper Review - Week 43
Unit 5: Semester Exam

40:1 - Discussion: Politics & Government
47:1 - Case Study: The Digital Divide
47:2 - Semester Review and Exam

Unit 6: Education and Training - Part 1

48:1 - Introduction to Education and Training
48:2 - What is Distance Learning?
48:3 - Project Spotlight-2
48:4 - Final Discussion - IA
48:5 - Term 6 Teacher Written Report
49:1 - Web 2.0 Revolution and Education
49:2 - Web 2.0 Student Presentation - Part 1 of 3
49:3 - Shall we all move to the cloud?

Unit 6: Education and Training - Part 2

50:1 - Overview of the Mock Exam
50:2 - Revision
50:3 - Project Spotlight-6

Unit 7: Mock Exam

51:1 - Web 2.0 Student Presentation - Part 2 of 3
51:2 - Virtual Learning Environments
51:3 - Death by PowerPoint
52:1 - Introduction to the Final IA
52:2 - Final IA Submission
52:3 - Reflection on the Final IA
53:1 - IT and Schools
53:2 - Keeping in Touch with Parents
53:3 - Internal Assessment Consent Form
54:1 - Jargonbusters - Networking Basics
54:2 - Wireless Networks and Education
54:3 - Web 2.0 Student Presentation - Part 3 of 3
55:1 - Assistive Technology
55:2 - Paper 1 Exam Assignment
56:1 - Social Networking and Education
56:2 - Education and Apps
56:3 - The Future of Education
56:4 - Summing Up the Unit

Unit 8: Education and Training – Part 2

57:1 - Introduction to Course Review
57:2 - Mind Maps Review 1/2
57:3 - Past Paper Peer Review 1/2
58:1 - Mind Map Review 2/2
58:2 - Past Paper Peer Review 2/2
58:3 - Term 7 Teacher Written Report
59:1 - Reviewing the Three Strands
59:2 - Strand 1: Social and Ethical Issues 1/4
59:3 - Strand 1: Social and Ethical Issues 2/4
59:4 - Strand 1: Social and Ethical Issues 3/4
59:5 - Strand 1: Social and Ethical Issues 4/4
60:1 - Strand 2: Area of Impact 1/3
60:2 - Strand 2: Area of Impact 2/3
60:3 - Strand 2: Area of Impact 3/3
61:1 - Strand 3: IT Systems 1/3
61:2 - Strand 3: IT Systems 2/3
61:3 - Strand 3: IT Systems 3/3
62:1 - Command Terms Revisited
62:2 - Final Discussion and Questions