

Intro To Computers

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1 Modules

1.1 Introduction to what is computers and computer science

1.1.1 Computer science is about computers as much as astronomy is about telescopes

1.1.2 History of computers

1.1.3 Uses of computers

1.1.4 Where computers fail

1.1.5 Operating systems and applications

1.2 Keeping Secrets

1.2.1 Keeping things private

1. Why?
2. What?
3. How?
 - (a) Nothing is 100% safe

1.2.2 Keeping things safe

1. Elaborate on How
2. Safety keeping requirements and technologies
3. Passwords/OTP dos and don't
4. Practicals
5. Cracking open the safes

1.2.3 Sharing things safely

1.2.4 Basics of encryption (theory and practical)

1.3 Processing data

1.3.1 What is data

1.3.2 How is data stored

1.3.3 How is data retrieved

1.3.4 Data processing (Only broad overview)

1. Word processing
2. Accounting software
3. Data bases
4. Spread sheets

1.3.5 Using spread sheets to gain insights on data

1. Co-expertise, Solving math/physics/chemistry problems using computers
 - (a) Using spreadsheets to graph
 - (b) Using programming to gain more insights

1.4 Introduction to basics of programming

1.4.1 Introduction to algorithms (braking problems down)

1.4.2 Introduction to python

1.4.3 Simple practical programs

1. Graphics
2. Games
3. Math solvers

1.5 Internet, web and social media

1.5.1 Accessing internet

1. Web
2. Messaging
3. Email

1.5.2 Internet resources

1. Wikipedia
2. Mailing lists
3. Social Media

1.5.3 Cloud

1. Concepts
2. Cloud storage
3. Services examples (google docs, zoho office)