Course Outline Summary – extracted from <http://bernard.alwaysdata.net/unit/7>

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| --- | --- | --- | --- |
| Unit | Videos | Articles  | Images |
| 1 | [**Computer Fundamentals**](http://www.youtube.com/watch?v=DoUj9_1h4SA)[**Files compressed**](http://www.youtube.com/watch?v=pcN6xHa0Y64)[**Hardware**](http://www.youtube.com/watch?v=WU_Xfk3rWvA)[**How computers work**](http://www.youtube.com/watch?v=qrToK_YXDIQ)[**Parts of a computer**](http://www.youtube.com/watch?v=kMRDmkFsUZs) | [**Hardware**](http://en.wikipedia.org/wiki/History_of_computing_hardware) | [**Files I**](http://www.texasranger.org/history/images/FilesArt.gif)[**Files II**](http://99points.info/wp-content/uploads/2010/03/filetypes.png)[**Parts of a computer**](http://krystalmegan.com/Computer%20Lessons/Word%20Processing%201%20Lessons/CPU.gif) |
| 2 | [**Hard Disk Drive**](http://www.youtube.com/watch?v=Bh80aaygIXg)[**Primary and Secondary Storage**](http://www.youtube.com/watch?v=6f736gCjJXY)[**The processor and the main memory**](http://www.youtube.com/watch?v=Jd3VBDOgUng)[**What is the BIOS and what does it do?**](http://www.youtube.com/watch?v=rgOZOyPMaJU) | [**Computer data storage**](http://en.wikipedia.org/wiki/Computer_data_storage) | [**Computer storage types**](http://upload.wikimedia.org/wikipedia/commons/thumb/3/3e/Computer_storage_types.svg/420px-Computer_storage_types.svg.png)[**Some old and not so old memory types**](http://fc00.deviantart.net/fs71/i/2012/079/2/6/some_old_and_not_so_old_memory_types_by_paulrokicki-d4tet9j.jpg)[**Computer memory**](http://2.bp.blogspot.com/_WgevVc7Pko0/S5y5oqgR1vI/AAAAAAAAAPQ/w4QkKT7xXcg/s320/ComputerMemory.gif) |
| 3 | [**What is a motherboard?**](http://www.youtube.com/watch?v=SPRHiQ_vSv4) [**What is in a CPU?**](http://www.youtube.com/watch?v=FbAilmI_QSc) [**CPU registers**](http://www.youtube.com/watch?v=RbZDezRyFQc)[**Computer ports**](http://www.youtube.com/watch?v=Juoja8awJuM)[**Mechanical CPU clock**](http://www.youtube.com/watch?v=0H4LTOYpAM4) | [**Bus (computing)**](http://en.wikipedia.org/wiki/Bus_%28computing%29)[**Universal serial bus**](http://en.wikipedia.org/wiki/Universal_Serial_Bus)[**Central Processing Unit**](http://en.wikipedia.org/wiki/Central_processing_unit) | [**AGP**](http://upload.wikimedia.org/wikipedia/commons/d/d1/AGP_slot.jpg)[**SATA VS IDE Cables**](http://www.computer-hardware-explained.com/image-files/sata-vs-ide-labelled.jpg)[**Parallel computer buses**](http://common.ziffdavisinternet.com/encyclopedia_images/CARDS.GIF)[**A computer**](http://faculty.simpson.edu/lydia.sinapova/www/cmsc150/LN150_Lewis/L02-Fig05.jpg)[**Computer buses**](http://ackadia.com/computer/images/system-bus.png) |
| 4 | [**Bit Depth**](http://www.youtube.com/watch?v=IujXVlz-y54)[**Choosing a monitor**](http://www.youtube.com/watch?v=oVymNrJCEPM)[**Digital sound**](http://www.youtube.com/watch?v=syAIVfDV3z0)[**Digitized sound**](http://www.youtube.com/watch?v=IlBmbt8IVv4)[**Input and output multimedia devices**](http://www.youtube.com/watch?v=eEA7FKT34xY)[**Synthesized sound**](http://www.youtube.com/watch?v=bV6xKPCillk)[**What is a dead pixel?**](http://www.youtube.com/watch?v=UnDXpCXPjZ0) | [**Sound card**](http://en.wikipedia.org/wiki/Sound_card)[**Display resolution**](http://en.wikipedia.org/wiki/Display_resolution%20)[**Graphics card**](http://en.wikipedia.org/wiki/Graphics_card) | [**Sound card**](http://upload.wikimedia.org/wikipedia/commons/thumb/8/8a/Turtle-Beach-Sound-Card.jpg/800px-Turtle-Beach-Sound-Card.jpg)[**Graphics card**](http://upload.wikimedia.org/wikipedia/commons/thumb/9/9a/HD4670.JPG/800px-HD4670.JPG) |
| 5 | [**Holographic Computer Touch Screen**](http://www.youtube.com/watch?v=YZCIsgOaUaA)[**OLED 3D RFID ID Cards**](http://www.youtube.com/watch?v=I3kfrNuYk_s) [**Pen Drive**](http://www.youtube.com/watch?v=k7ts3ssKVdQ)[**Transparent OLED Screen**](http://www.youtube.com/watch?v=rwCi-WqMIFA) | [**Some interesting**](http://www.buzzle.com/articles/why-are-keyboard-keys-not-in-alphabetical-order.html)[**Light pen (selector pen)**](http://en.wikipedia.org/wiki/Light_pen) | [**Keyboard**](http://www.computerhope.com/pictures/keyboard/keyboard.gif)[**The mouse**](http://imagenes.es.sftcdn.net/blog/es/2011/03/tipos-de-ratones.jpg)[**Printers**](http://laislatuerta.org/wp-content/uploads/Evolucion-de-las-impresoras.jpg)[**Peripherals devices**](http://reckless7group.files.wordpress.com/2011/04/other-peripheral-devices.jpg)[**Output peripherals**](http://2.bp.blogspot.com/_6fgCYh744Ro/TQgb-J_GAEI/AAAAAAAAABA/80HmyhFDWoM/s1600/my-network.png) |
| 6 | [**Algorithms I**](http://www.youtube.com/watch?v=nj1x6SjGp9s)[**Algorithms II**](http://www.youtube.com/watch?v=z_npAN1QNiE)[**Compiler**](http://www.youtube.com/watch?v=o-xSgi9o5vk)[**Example of algorithm I**](http://www.youtube.com/watch?v=TiiYoJAQhO8)[**Example of algorithm II**](http://www.youtube.com/watch?v=k0xgjUhEG3U)[**Malware I**](http://www.youtube.com/watch?v=df-6lh7Ul5Y)[**Malware II**](http://www.youtube.com/watch?v=afzkoB_lYNk)[**Operating systems**](http://www.youtube.com/watch?v=RdYsw4EF090)[**Software licensing**](http://www.youtube.com/watch?v=3rHWqzIOYPc)[**Virtual machines**](http://www.youtube.com/watch?v=6ftLGkkKhLY) | [**Comercial Software**](http://en.wikipedia.org/wiki/Commercial_software)[**Licenses for Public software.**](http://www.gnu.org/philosophy/categories.html#PublicDomainSoftware)[**Hello World**](http://en.wikipedia.org/wiki/Hello_world_program_examples)[**Free and open-source software licenses**](http://en.wikipedia.org/wiki/Comparison_of_free_software_licenses)[**Operating system list**](http://en.wikipedia.org/wiki/List_of_operating_systems)[**Open Source**](http://en.wikipedia.org/wiki/Open_source)[**BSD License**](http://en.wikipedia.org/wiki/BSD_licenses)[**Free Software**](http://en.wikipedia.org/wiki/Free_software)[**Apache License**](http://en.wikipedia.org/wiki/Apache_License)[**Propietary Software**](http://en.wikipedia.org/wiki/Proprietary_software)[**Copyleft**](http://en.wikipedia.org/wiki/Copyleft) | [**Free-Software conceptual schedule.**](http://commons.wikimedia.org/wiki/File%3AMapa_conceptual_del_software_libre.svg?uselang=es)[**Free-Software Program icons**](http://4.bp.blogspot.com/_dg7D79TGO8Q/TTyCXqAbkrI/AAAAAAAAAFE/6G_1_wvsWYg/s1600/software-libre.png)[**Compiler**](http://www.circuitstoday.com/wp-content/uploads/2012/07/compiler.jpg)[**Levels of programming languages**](http://3.bp.blogspot.com/-btpK1XKZbWo/T9FBqYz3bjI/AAAAAAAABKA/qGt4MDRu0T8/s1600/level%2Bof%2Bprogramming%2Blanguage.png) |
| 7 | [**DNS**](http://www.youtube.com/watch?v=2ZUxoi7YNgs)[**History of internet**](http://www.youtube.com/watch?v=9hIQjrMHTv4)[**How does the Internet works?**](http://www.youtube.com/watch?v=i5oe63pOhLI)[**In 1994, what the Internet is**](http://www.youtube.com/watch?v=JUs7iG1mNjI)[**Introduction to computer networks**](http://www.youtube.com/watch?v=ClPA3F_ZXds) | [**List of device bit rates**](http://en.wikipedia.org/wiki/List_of_device_bit_rates) | [**Client/Server Peer-to-Peer and Hybrids**](http://ars.els-cdn.com/content/image/1-s2.0-S0140366401003218-gr2.gif)[**Client/Server vs Peer-to-Peer**](http://blog.gogrid.com/wp-content/uploads/2009/05/image.png)[**Computer networks topologies**](http://media.techtarget.com/WhatIs/images/topology.gif) |