

T1 central processing unit	T1 control unit	T1 arithmetic logic unit
T1 register	T1 bus	T1 clock speed
T1 core	T1 graphics processing unit	T1 RAM

T1 The processor component that performs arithmetic and logical operations.	T1 The part of a processor that coordinates instruction execution and directs other components using control signals.	T1 The processor that fetches, decodes and executes program instructions.
T1 The number of cycles of a processor's clock per second; it alone does not determine how quickly every program runs.	T1 A shared set of wires that carries data, addresses or control signals between parts of a computer.	T1 A small, fast storage location within a processor used to hold data, addresses or instructions temporarily.
T1 Random-access memory used for working data and instructions, usually losing its contents when power is removed.	T1 A processor designed to perform many similar operations in parallel, such as calculations for image pixels.	T1 An instruction-processing unit within a processor; multiple cores can work on tasks concurrently.

T1 ROM	T1 cache	T1 secondary storage
T1 compression	T1 lossless	T1 lossy
T1 cloud computing	T1 binary	T1 bit

T1 Non-volatile storage used to retain data and programs beyond immediate processing.	T1 Fast storage holding copies of frequently needed data or instructions to reduce access time.	T1 Non-volatile memory whose stored contents are normally read rather than changed during ordinary use.
T1 Describing compression that discards some original information so it cannot be perfectly recovered.	T1 Describing compression from which the original data can be recovered exactly.	T1 Reducing the amount of data needed to represent a file, using a lossless or lossy method.
T1 A binary digit, taking the value zero or one.	T1 A number system using base two, with the digits zero and one.	T1 Providing computing resources such as processing or storage through a network, usually the internet.

T1 byte	T1 hexadecimal	T1 two's complement
T1 Unicode	T1 pixel	T1 colour depth
T1 sample rate	T1 logic gate	T1 truth table

T1 A signed binary integer representation in which a negative value is formed by inverting the positive value's bits and adding one within a fixed bit width.	T1 A base-sixteen number system using digits zero to nine and letters A to F.	T1 A group of eight bits, commonly used as a unit of data storage.
T1 The number of bits per pixel.	T1 An individual picture element in a digital image or display.	T1 A standard assigning code points to characters and symbols, represented using encodings such as UTF-8 or UTF-16.
T1 A table listing the output of a logical expression or circuit for every combination of inputs.	T1 A device or operation that applies a Boolean rule to one or more inputs to produce an output.	T1 The number of measurements of a sound signal taken per second during digital sampling.

T1 operating system	T1 process management	T1 memory management
T1 driver	T1 scheduler	T1 time slice
T1 polling	T1 interrupt	T2 network

T1 Operating-system functions that allocate, track and reclaim memory and manage address mappings where supported.	T1 Operating-system activities that create, coordinate, schedule and terminate processes and manage their resources.	T1 System software that manages hardware resources and provides services for applications.
T1 A short interval of processor time allocated to a task before another task may run.	T1 The operating-system component that chooses which ready task receives processor time.	T1 Software that lets an operating system communicate with and control a particular device.
T2 A set of connected devices or nodes that can exchange information.	T1 A signal or event that requests processor attention, causing execution to transfer to a handler when accepted.	T1 Having software check a device's status again and again to see whether it needs attention.

T2 LAN	T2 WAN	T2 VPN
T2 MAC address	T2 switch	T2 router
T2 firewall	T2 client–server	T2 peer-to-peer

T2 A virtual private network providing a protected logical connection across another network, commonly using encryption.	T2 A wide area network linking devices or local networks over a large geographical area.	T2 A local area network connecting devices within a limited area, such as a school site.
T2 A network device that forwards packets between networks using destination addresses and routing information.	T2 A network device that forwards frames to the appropriate ports using hardware addresses.	T2 A link-layer address associated with a network interface; it may be configured or randomised rather than permanently fixed.
T2 A network arrangement in which participating computers can provide services directly to one another rather than relying only on a central server.	T2 A network arrangement in which clients request services and servers provide them.	T2 A security system that filters network traffic according to rules.

T2 topology	T2 protocol	T2 layer
T2 encapsulation	T2 DHCP	T2 DNS
T2 IP address	T2 packet switching	T2 packet

T2 A level of a network architecture responsible for particular communication functions and using services below it.	T2 An agreed set of rules governing communication between devices or systems.	T2 The layout of the connections.
T2 Turns a domain name into an IP address.	T2 A protocol that lets a device obtain network configuration, such as an IP address, from a server for a specified lease period.	T2 In networking, wrapping data with protocol information; in OOP, grouping data with methods and controlling access through an interface.
T2 Units of data sent through a network, containing payload and control information such as addressing details.	T2 Sending data as separate packets that share network links and may travel along different routes.	T2 A logical address used to identify a network interface and route packets to its network location.

T2 bandwidth	T2 latency	T2 throughput
T2 authentication	T2 authorization	T2 encryption
T2 symmetric encryption	T2 asymmetric encryption	T2 digital certificate

T2 The amount of data actually delivered or work completed per unit time.	T2 The time delay between initiating an action or transmission and receiving its response or effect.	T2 The data-carrying capacity of a network link, commonly measured in bits per second in this course.
T2 Transforming information using an algorithm and key so that unauthorised readers cannot readily understand it.	T2 Permission for an identified user or system to access a resource or perform an action.	T2 Checking that a claimed identity is valid.
T2 A digitally signed document binding an identity or domain to a public key, checked through a trusted certificate chain.	T2 Encryption using a pair of related keys, one public and one private, for complementary operations.	T2 Encryption in which the same secret key is used to encrypt and decrypt data.

T3 database	T3 database management system	T3 data redundancy
T3 inconsistency	T3 relational database	T3 table
T3 record	T3 field	T3 primary key

T3 Unnecessary repetition of the same facts in stored data, which can cause update problems.	T3 Software used to store, query, update, secure and manage a database.	T3 An organised collection of data that can be accessed and managed.
T3 A collection of data organised into rows and columns.	T3 A database that organises data into tables connected through matching key values.	T3 A disagreement between stored values that are meant to represent the same fact.
T3 A field or combination of fields that uniquely identifies each record in a database table.	T3 A named item of data within a database record.	T3 A stored collection of information about an item, person or event.

T3 foreign key	T3 composite key	T3 referential integrity
T3 entity	T3 entity-relationship diagram	T3 link table
T3 normalisation	T3 first normal form	T3 second normal form

T3 A rule requiring a non-null foreign-key value to match a referenced key; permitted nulls represent no specified reference.	T3 A key consisting of two or more fields whose combined values identify a record.	T3 A field or group of fields that refers to a candidate key in another or the same database table.
T3 A database table that represents associations between records in other tables, commonly resolving a many-to-many relationship.	T3 A diagram showing entities, their attributes and the relationships between them in a data model.	T3 A thing we store data about: a student, a book.
T3 First normal form with every non-prime attribute fully dependent on every candidate key, avoiding partial key dependencies.	T3 A relational table form with atomic field values and no repeating groups.	T3 Organising relational database tables to reduce unnecessary duplication and avoid update, insertion and deletion anomalies.

T3 third normal form	T3 SQL	T3 join
T3 aggregate function	T3 transaction	T4 machine learning
T4 artificial intelligence	T4 deep learning	T4 supervised learning

T3 An SQL operation that combines rows from tables according to a specified relationship or condition.	T3 Structured Query Language, used to define, query and manipulate data in relational databases.	T3 A form in which each nontrivial dependency has a superkey determinant or a prime dependent attribute, avoiding the usual non-key transitive dependencies.
T4 Methods that use data to fit models for making predictions or identifying patterns.	T3 A group of operations that must all succeed or all fail, such as moving money: take it from one account and add it to another.	T3 Database functions that combine values from multiple rows to produce a summary result, such as a count or average.
T4 Learning a model from examples supplied with target answers or labels.	T4 Machine learning using neural networks with multiple processing layers to learn representations from data.	T4 Computer methods designed to perform tasks involving abilities such as learning, reasoning, perception or language processing.

T4 unsupervised learning	T4 reinforcement learning	T4 classification
T4 regression	T4 training	T4 test data
T4 overfitting	T4 accuracy	T4 bias

T4 A prediction task whose output is a category, such as spam or not spam.	T4 Learning how to choose actions through interaction with an environment and feedback such as rewards.	T4 Learning patterns or groups from data without supplied target labels.
T4 Data kept separate from model fitting and selection to evaluate performance on unseen examples.	T4 The process of fitting a model's adjustable parameters or rules using training data.	T4 A statistical method for modelling how a response variable is related to one or more explanatory variables.
T4 A systematic preference or prejudice that can distort judgement, decisions or the representation of information.	T4 The fraction of a classifier's predictions that match the correct classes.	T4 Learning training-specific detail or noise so well that performance on new data suffers.

T5 decomposition	T5 pattern recognition	T5 abstraction
T5 algorithmic design	T5 model	T5 algorithm
T5 input	T5 output	T5 sequence

T5 Representing essential features while leaving out unnecessary detail.	T5 Finding similarities or recurring structures that can help solve related problems.	T5 Breaking a computational problem into smaller, more manageable sub-problems.
T5 A finite sequence of precise steps for solving a problem or carrying out a task.	T5 A simplified representation of a system used to explain, analyse or predict its behaviour.	T5 Developing precise, ordered steps that solve a computational problem.
T5 The order in which items appear or operations are carried out.	T5 A result produced by a function, calculation, device or program.	T5 A value, signal or resource supplied to a function, program, device or process.

T5 selection	T5 iteration	T5 flowchart
T5 trace table	T5 pseudocode	T5 specification
T5 normal data	T5 boundary data	T5 invalid data

T5 A diagram showing the sequence of steps and decisions in a process or algorithm.	T5 Repeating a sequence of instructions or calculations.	T5 Choosing which branch of instructions to execute according to a condition.
T5 A statement of the required behaviour, inputs, outputs and constraints of a solution.	T5 A language-independent description of an algorithm using structured, programming-like statements.	T5 A table recording variable values and outputs as an algorithm's steps are followed.
T5 Input that does not meet the specification and should be rejected or handled as invalid.	T5 Test values at the edges of an allowed range and, when testing validation, immediately outside it.	T5 Typical valid input values used to check that a program works as expected.

T6 variable	T6 constant	T6 data type
T6 casting	T6 integer division	T6 modulo
T6 string	T6 immutable	T6 concatenation

T6 A classification of values that determines their representation and permitted operations.	T6 A named or literal value that does not change during the relevant part of a program.	T6 A quantity or named value that can change or take different values.
T6 An operation producing a remainder; in Python, <code>a % b</code> equals <code>a</code> minus <code>b</code> times <code>a // b</code> for nonzero <code>b</code>.	T6 Division producing an integer quotient; Python's <code>//</code> floors the mathematical quotient.	T6 Explicit conversion of a value from one data type to another where the conversion is supported.
T6 Joining sequences, such as strings, end to end.	T6 Unable to have its stored value changed after creation; an operation may instead produce a new object.	T6 A sequence of characters treated as a single data value.

T6 exception	T6 trace table	T6 debugger
T6 static data structure	T6 dynamic data structure	T6 array
T6 index	T6 two-dimensional array	T6 abstract data type

T6 A tool for examining a running program, using features such as breakpoints, stepping and variable inspection.	T6 A table recording variable values and outputs as an algorithm's steps are followed.	T6 An event raised during execution that transfers control to a handler or stops execution if unhandled.
T6 An indexed collection of elements arranged in one or more dimensions.	T6 A data structure whose size can change while a program runs.	T6 A data structure with an allocated size fixed during the relevant execution period.
T6 A specification of stored values and permitted operations that does not depend on a particular implementation.	T6 A table: a list of rows, where each row is a list.	T6 A position marker or lookup structure used to locate data within a collection or database.

T6 LIFO	T6 FIFO	T6 underflow
T6 overflow	T6 sequence	T6 selection
T6 iteration	T6 infinite loop	T6 function

T6 An attempt to remove an item from an empty stack or queue in this data-structure context.	T6 An ordering rule in which the earliest added item is removed first.	T6 An ordering rule in which the most recently added item is removed first.
T6 Choosing which branch of instructions to execute according to a condition.	T6 The order in which items appear or operations are carried out.	T6 An attempt to add an item beyond a bounded data structure's capacity in this context.
T6 A named callable program unit that performs a task and may receive arguments and return a value.	T6 A loop that continues indefinitely because its stopping condition is never reached or no stopping condition is provided.	T6 Repeating a sequence of instructions or calculations.

T6 parameter	T6 return	T6 modularity
T6 local variable	T6 global variable	T6 boundary case
T6 linear search	T6 binary search	T6 bubble sort

T6 Organising a system as separate components with defined responsibilities and interfaces.	T6 To finish a function call and pass control, and optionally a result, back to its caller.	T6 A named input in a function definition that receives an argument when the function is called.
T6 A case at an edge of the input range or behaviour defined by a specification.	T6 A variable declared outside a routine's local scope and accessible wherever the language's program or module scope rules permit.	T6 A variable whose name is accessible only within a particular function, block or other limited scope.
T6 A sorting algorithm that repeatedly compares adjacent items and swaps those in the wrong order until the sequence is ordered.	T6 A search of ordered data that repeatedly compares with the middle item and discards half of the remaining search range.	T6 Checking items in sequence until the required item is found or the list ends.

T6 selection sort	T6 file	T6 mode
T6 Big O notation	T7 class	T7 attribute
T7 method	T7 object	T7 instance

T6 A setting that determines how a file is opened or used, such as reading, writing or appending.	T6 A named collection of data stored and managed as a unit.	T6 A sorting algorithm that repeatedly selects the smallest remaining item and places it next in the sorted portion.
T7 A named property or characteristic associated with an object, element or record.	T7 A blueprint: it defines the attributes (the data each object holds) and the methods (what each object can do).	T6 Notation giving an asymptotic upper bound on how a chosen cost grows with input size; it is not restricted to worst-case analysis.
T7 A particular occurrence or example; in object-oriented programming, an object created from a class.	T7 An entity in a program with associated state and behaviour, often an instance of a class.	T7 A defined way of performing a task or investigation; in programming, a function associated with a class or object.

T7 instantiation	T7 state	T7 behaviour
T7 constructor	T7 reference	T7 instance attribute
T7 static	T7 encapsulation	T7 private

T7	T7	T7
The actions or responses provided by an object's methods.	The current values of an object's attributes.	Creating an object as an instance of a class.
T7	T7	T7
An attribute whose value belongs to an individual object rather than being shared as a class attribute.	A value or name association that identifies an object, allowing more than one name to refer to the same object.	A special operation used to initialise a newly created object.
T7	T7	T7
Restricted from ordinary external access in languages that enforce it; a leading Python underscore is only a non-public convention.	In networking, wrapping data with protocol information; in OOP, grouping data with methods and controlling access through an interface.	Associated with a class rather than a particular instance in this object-oriented context.

T7 public	T7 accessor	T7 mutator
T8 case study	T8 stakeholder	T8 additional terminology
T8 command term	T8 anonymised	T9 computational solution

T7 A method that changes an object's state, often checking a supplied value first.	T7 A method that reads and returns an attribute's value without changing the object's state.	T7 Accessible from other code through a class's public interface, subject to the language's access rules.
T8 Terms supplied with a case study that students are expected to research beyond the core course content.	T8 A person or group with an interest in, or affected by, an organisation's activities.	T8 A few pages about one real-world use of computing: a hospital, a farm, a transport network or a game studio, for example.
T9 A designed and implemented computer-based response to a specified problem or user need.	T8 Processed so individuals cannot reasonably be identified from the data, rather than merely replacing their names with reversible codes.	T8 An instruction word indicating the type of response expected, such as compare or explain.

T9 end user	T9 success criteria	T9 test plan
T9 normal data	T9 boundary data	T9 invalid data
T9 AI tool	T9 academic integrity	T9 acknowledged

T9 A documented set of tests specifying inputs, actions and expected results for checking a solution.	T9 The specific, testable things the finished product must do.	T9 The person or group who will use the finished product.
T9 Input that does not meet the specification and should be rejected or handled as invalid.	T9 Test values at the edges of an allowed range and, when testing validation, immediately outside it.	T9 Typical valid input values used to check that a program works as expected.
T9 Explicitly credited to its source or contributor.	T9 Honest, responsible work that credits contributions and sources and does not misrepresent authorship.	T9 Software using artificial-intelligence methods to assist a task, such as generating or analysing content.

T9

evaluation

T9		
evaluation		

		T9 A reasoned assessment of something's quality, effectiveness or significance against relevant criteria.