

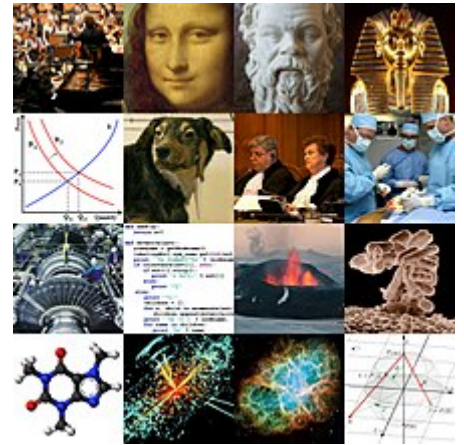
# Outline of academic disciplines

The following outline is provided as an overview of and topical guide to academic disciplines:

An academic discipline or field of study is a branch of knowledge, taught and researched as part of higher education. A scholar's discipline is commonly defined by the university faculties and learned societies to which they belong and the academic journals in which they publish research.

Disciplines vary between well-established ones that exist in almost all universities and have well-defined rosters of journals and conferences, and nascent ones supported by only a few universities and publications. A discipline may have branches, and these are often called sub-disciplines.

The following outline is provided as an overview of and topical guide to academic disciplines. In each case an entry at the highest level of the hierarchy (e.g., Humanities) is a group of broadly similar disciplines; an entry at the next highest level (e.g., Music) is a discipline having some degree of autonomy and being the basic identity felt by its scholars; and lower levels of the hierarchy are sub-disciplines not normally having any role in the structure of the university's governance.



Collage of images representing different academic disciplines

## Contents

### Humanities

#### Arts

- Performing arts

- Visual arts

- History

- Languages and literature

- Law

- Philosophy

- Theology

### Social sciences

- Anthropology

- Archaeology

- Economics

- Human geography

- Political science

- Psychology

- Sociology

- Social Work

## **Natural Sciences**

Biology  
Chemistry  
Earth science  
Space sciences  
Physics

## **Formal Sciences**

Computer Science  
Mathematics  
Statistics

## **Applied Sciences**

Business  
Engineering and technology  
Medicine and health

## **See also**

## **References**

## **External links**

# **Humanities**

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## **Arts**

### **Performing arts**

- Music (outline)
  - Accompanying
  - Chamber music–
  - Church music
  - Conducting
    - Choral conducting
    - Orchestral conducting
    - Wind ensemble conducting
  - Early music
  - Jazz studies (outline)
  - Musical composition
  - Music education
  - Music history
  - Musicology
    - Historical musicology
    - Systematic musicology
  - Ethnomusicology

- Music theory
- Orchestral studies
- Organology
  - Organ and historical keyboards
  - Piano
  - Strings, harp, oud, and guitar (outline)
  - Singing
  - Woodwinds, brass, and percussion
- Recording
- Dance (outline)
  - Choreography
  - Dance notation
  - Ethnochoreology
  - History of dance
- Television (outline)
  - Television studies
- Theatre (outline)
  - Acting
  - Directing
  - Dramaturgy
  - History
  - Musical theatre
  - Playwrighting
  - Puppetry
  - Scenography
  - Stage design
  - Ventriloquism
- Film (outline)
  - Animation
  - Film criticism
  - Filmmaking
  - Film theory
  - Live action

## Visual arts

- Fine arts
  - Graphic arts
    - Drawing (outline)
    - Painting (outline)
    - Photography (outline)
  - Sculpture (outline)

- Applied arts
  - Animation
  - Calligraphy
  - Decorative arts
  - Mixed media
  - Printmaking
  - Studio art
  - Architecture (Outline of architecture)
    - Interior architecture
    - Landscape architecture
      - Landscape design
      - Landscape planning
    - Architectural analytics
    - Historic preservation
    - Interior design (interior architecture)
    - Technical drawing

## History

- African history
- American history
- Ancient history
  - Ancient Egypt
  - Carthage
  - Ancient Greek history (outline)
  - Ancient Roman history (outline)
  - Assyrian Civilization
  - Bronze Age Civilizations
  - Biblical history
  - History of the Indus Valley Civilization
  - Preclassic Maya
  - History of Mesopotamia
  - The Stone Age
  - History of the Yangtze civilization
  - History of the Yellow River civilization
- Asian history
  - Chinese history
  - Indian history (outline)
  - Indonesian history
  - Iranian history
- Australian history
- Ecclesiastical history of the Catholic Church
- Economic history
- Environmental history
- European history

- Intellectual history
- Jewish history
- Latin American history
- Modern history
- History of philosophy
  - Ancient philosophy
  - Contemporary philosophy
  - Medieval philosophy
    - Humanism (outline)
    - Scholasticism
  - Modern philosophy
- Political history
- Pre-Columbian era
- Russian history
- History of culture
- Scientific history
- Technological history
- World history
- Public history

## **Languages and literature**

- Linguistics (Outline of linguistics)
  - Applied linguistics
  - Composition studies
  - Computational linguistics
  - Discourse analysis
  - English studies
  - Etymology
  - Grammar
  - Historical linguistics
  - History of linguistics
  - Interlinguistics
  - Lexicology
  - Linguistic typology
  - Morphology (linguistics)
  - Natural language processing
  - Philology
  - Phonetics
  - Phonology
  - Pragmatics
  - Psycholinguistics
  - Rhetoric
  - Semantics
  - Semiotics (outline)

- Sociolinguistics
- Syntax
- Usage
- Word usage
- Comparative literature
- Creative writing
  - Fiction (outline)
  - Non-fiction
- English literature
- History of literature
  - Medieval literature
  - Post-colonial literature
  - Post-modern literature
- Literary theory
  - Critical theory (outline)
  - Literary criticism
  - Poetics
- Poetry
- World literature
  - African-American literature
  - American literature
  - British literature

## Law

- Administrative law
- Canon law

- Civil law
  - Admiralty law
  - Animal law/Animal rights
  - Civil procedure
  - Common law
  - Contract law
  - Corporations
  - Environmental law
  - Family law
  - Federal law
  - International law
    - Public international law
    - Supranational law
  - Labor law
  - Property law
  - Tax law
  - Tort law (outline)
- Comparative law
- Competition law
- Constitutional law
- Criminal law
  - Criminal justice (outline)
  - Criminal procedure
    - Forensic science (outline)
    - Police science
- Islamic law
- Jewish law (outline)
- Jurisprudence (Philosophy of Law)
- Legal management
  - Commercial law
  - Corporate law
- Procedural law
- Substantive law

## **Philosophy**

- Aesthetics (outline)

- Applied philosophy
  - Philosophy of economics
  - Philosophy of education
  - Philosophy of engineering
  - Philosophy of history
  - Philosophy of language
  - Philosophy of law
  - Philosophy of mathematics
  - Philosophy of music
  - Philosophy of psychology
  - Philosophy of religion
  - Philosophy of physical sciences
    - Philosophy of biology
    - Philosophy of chemistry
    - Philosophy of physics
  - Philosophy of social science
  - Philosophy of technology
  - Systems philosophy
- Epistemology (outline)
  - Justification
  - Reasoning errors
- Ethics (outline)
  - Applied ethics
    - Animal rights
    - Bioethics
    - Environmental ethics
  - Meta-ethics
  - Moral psychology, Descriptive ethics, Value theory
  - Normative ethics
    - Virtue ethics
- Logic (outline)
  - Mathematical logic
  - Philosophical logic
- Meta-philosophy
- Metaphysics (outline)
  - Philosophy of Action
  - Determinism and Free will
  - Ontology
  - Philosophy of mind
    - Philosophy of pain
    - Philosophy of artificial intelligence
    - Philosophy of perception
  - Philosophy of space and time
  - Teleology
  - Theism and Atheism



- Philosophical traditions and schools
  - African philosophy
  - Analytic philosophy
  - Aristotelianism
  - Continental philosophy
  - Eastern philosophy
  - Feminist philosophy
  - Platonism
- Social philosophy and political philosophy
  - Anarchism (outline)
  - Feminist philosophy
  - Libertarianism (outline)
  - Marxism

## **Theology**

- Biblical studies
- Religious studies
- Biblical Hebrew, Biblical Greek, Aramaic
- Buddhist theology
- Christian theology
  - Anglican theology
  - Baptist theology
  - Catholic theology
  - Eastern Orthodox theology
  - Protestant theology
- Hindu theology
- Jewish theology
- Muslim theology

## **Social sciences**

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### **Anthropology**

- Biological anthropology
- Linguistic anthropology
- Cultural anthropology
- Social anthropology

### **Archaeology**

### **Economics**

- Agricultural economics

- Anarchist economics
- Applied economics
- Behavioural economics
- Bioeconomics
- Complexity economics
- Computational economics
- Consumer economics
- Development economics
- Ecological economics
- Econometrics
- Economic geography
- Economic sociology
- Economic systems
- Education economics
- Energy economics
- Entrepreneurial economics
- Environmental economics
- Evolutionary economics
- Experimental economics
- Feminist economics
- Financial econometrics
- Financial economics
- Green economics
- Growth economics
- Human development theory
- Industrial organization
- Information economics
- Institutional economics
- International economics
- Islamic economics
- Labor economics
- Law and economics
- Macroeconomics
- Managerial economics
- Marxian economics
- Mathematical economics
- Microeconomics
- Monetary economics
- Neuroeconomics
- Participatory economics
- Political economy
- Public economics
- Public finance
- Real estate economics
- Resource economics

- Social choice theory
- Socialist economics
- Socioeconomics
- Transport economics
- Welfare economics

## **Human geography**

- Behavioral geography
- Cognitive geography
- Cultural geography
- Development geography
- Economic geography
- Health geography
- Historical geography
- Language geography
- Marketing geography
- Military geography
- Political geography
- Population geography
- Religion geography
- Social geography
- Strategic geography
- Time geography
- Tourism geography
- Transport geography
- Urban geography

## **Political science**

- American politics
- Canadian politics
- Civics
- Comparative politics
- European studies
- Geopolitics (Political geography)
- International relations
- International organizations
- Nationalism studies
- Peace and conflict studies
- Policy studies
- Political behavior
- Political culture
- Political economy
- Political history
- Political philosophy

- Public administration
- Public law
- Psephology
- Social choice theory

## **Psychology**

- Abnormal psychology
- Applied psychology
- Biological psychology
- Clinical neuropsychology
- Clinical psychology
- Cognitive psychology
- Community psychology
- Comparative psychology
- Conservation psychology
- Consumer psychology
- Counseling psychology
- Criminal psychology
- Cultural psychology
  - Asian psychology
  - Black psychology
- Developmental psychology
- Differential psychology
- Ecological psychology
- Educational psychology
- Environmental psychology
- Evolutionary psychology
- Experimental psychology
- Group psychology
- Family psychology
- Feminine psychology
- Forensic developmental psychology
- Forensic psychology
- Health psychology
- Humanistic psychology
- Indigenous psychology
- Legal psychology
- Mathematical psychology
- Media psychology
- Medical psychology
- Military psychology
- Moral psychology and Descriptive ethics
- Music psychology
- Neuropsychology

- Occupational health psychology
- Occupational psychology
- Organizational psychology
- Parapsychology (outline)
- Pediatric psychology
- Pedology (children study)
- Personality psychology
- Phenomenology
- Political psychology
- Positive psychology
- Psychoanalysis
- Psychobiology
- Psychology of religion
- Psychometrics
- Psychopathology
  - Child psychopathology
- Psychophysics
- Quantitative psychology
- Rehabilitation psychology
- School psychology
- Social psychology
- Sport psychology
- Traffic psychology
- Transpersonal psychology

## **Sociology**

- Analytical sociology
- Applied sociology
  - Leisure studies
  - Political sociology
  - Public sociology
  - Social engineering
- Architectural sociology

- Area studies
  - African studies
  - American studies
    - Appalachian studies
    - Canadian studies
    - Latin American studies
  - Asian studies
    - Central Asian studies
    - East Asian studies
    - Indology
    - Iranian studies
    - Japanese studies
    - Korean studies
    - Pakistan studies
    - Sindhology
    - Sinology (outline)
    - Southeast Asian studies
    - Thai studies
  - Australian studies
  - European studies
    - Celtic studies
    - German studies
    - Sociology in Poland
    - Scandinavian studies
    - Slavic studies
  - Middle Eastern studies
    - Arab studies
    - Assyriology
    - Egyptology
    - Jewish studies
- Behavioral sociology
- Collective behavior
  - Social movements
- Community informatics
  - Social network analysis
- Comparative sociology
- Conflict theory
- Criminology/Criminal justice (outline)
- Critical management studies
- Critical sociology
- Cultural sociology

- Cultural studies/ethnic studies
  - Africana studies
  - Cross-cultural studies
  - Culturology
  - Deaf studies
  - Ethnology
  - Utopian studies
  - Whiteness studies
- Demography/Population
- Digital sociology
- Dramaturgical sociology
- Economic sociology
- Educational sociology
- Empirical sociology
- Environmental sociology
- Evolutionary sociology
- Feminist sociology
- Figurational sociology
- Futures studies (outline)
- Gender studies
  - Men's studies
  - Women's studies
- Historical sociology
- Human ecology
- Humanistic sociology
- Industrial sociology
- Interactionism
- Interpretive sociology
  - Ethnomethodology
  - Phenomenology
  - Social constructionism
  - Symbolic interactionism
- Jealousy sociology
- Macrosociology
- Marxist sociology
- Mathematical sociology
- Medical sociology
- Mesosociology
- Microsociology
- Military sociology
- Natural resource sociology
- Organizational studies
- Phenomenological sociology
- Policy sociology
- Psychoanalytic sociology

- Science studies/Science and technology studies
- Sexology
  - Heterosexism
  - Human sexual behavior
  - Human sexuality (outline)
  - Queer studies/Queer theory
  - Sex education
- Social capital
- Social change
- Social conflict theory
- Social control
  - Pure sociology
- Social economy
- Social philosophy
- Social policy
- Social psychology
- Social stratification
- Social theory
- Social transformation
  - Computational sociology
  - Economic sociology/Socioeconomics
    - Economic development
    - Social development
- Sociobiology
- Sociocybernetics
- Sociolinguistics
- Sociology of aging
- Sociology of agriculture
- Sociology of art
- Sociology of autism
- Sociology of childhood
- Sociology of conflict
- Sociology of culture
- Sociology of cyberspace
- Sociology of development
- Sociology of deviance
- Sociology of disaster
- Sociology of education
- Sociology of emotions
- Sociology of fatherhood
- Sociology of finance
- Sociology of food
- Sociology of gender
- Sociology of generations
- Sociology of globalization



- Sociology of government
- Sociology of health and illness
- Sociology of human consciousness
- Sociology of immigration
- Sociology of knowledge
- Sociology of language
- Sociology of law
- Sociology of leisure
- Sociology of literature
- Sociology of markets
- Sociology of marriage
- Sociology of motherhood
- Sociology of music
- Sociology of natural resources
- Sociology of organizations
- Sociology of peace, war, and social conflict
- Sociology of punishment
- Sociology of race and ethnic relations
- Sociology of religion
- Sociology of risk
- Sociology of science
- Sociology of scientific knowledge
- Sociology of social change
- Sociology of social movements
- Sociology of space
- Sociology of sport
- Sociology of technology
- Sociology of terrorism
- Sociology of the body
- Sociology of the family
- Sociology of the history of science
- Sociology of the Internet
- Sociology of work
- Sociomusicology
- Structural sociology
- Theoretical sociology
- Urban studies or Urban sociology/Rural sociology
- Victimology
- Visual sociology

## **Social Work**

- Clinical Social Work
- Community practice
- Mental health

- Psychosocial rehabilitation
- Person-centered therapy
- Family therapy
- Financial social work

## Natural Sciences

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### Biology

- Aerobiology
- Anatomy
  - Comparative anatomy
  - Human anatomy (outline)
- Biochemistry (outline)
- Bioinformatics
- Biophysics (outline)
- Biotechnology (outline)
- Botany (outline)
  - Ethnobotany
  - Phycology
- Cell biology (outline)
- Chronobiology
- Computational biology
- Cryobiology
- Developmental biology
  - Embryology
  - Teratology
- Ecology (outline)
  - Agroecology
  - Ethnoecology
  - Human ecology
  - Landscape ecology
- Endocrinology
- Evolutionary biology
- Genetics (outline)
  - Behavioural genetics
  - Molecular genetics
  - Population genetics
- Histology
- Human biology
- Immunology (outline)
- Limnology
- Linnaean taxonomy

- Marine biology
- Mathematical biology
- Microbiology
- Molecular biology
- Mycology
- Neuroscience (outline)
  - Behavioral neuroscience
- Nutrition (outline)
- Paleobiology
  - Paleontology
- Parasitology
- Pathology
  - Anatomical pathology
  - Clinical pathology
  - Dermatopathology
  - Forensic pathology
  - Hematopathology
  - Histopathology
  - Molecular pathology
  - Surgical pathology
- Physiology
  - Human physiology
    - Exercise physiology
- Structural Biology
- Systematics (Taxonomy)
- Systems biology
- Virology
  - Molecular virology
- Xenobiology

- Zoology (outline)
  - Animal communications
  - Apiology
  - Arachnology
  - Carcinology
  - Cetology
  - Entomology
    - Forensic entomology
  - Ethnozooology
  - Ethology
  - Helminthology
  - Herpetology
  - Ichthyology (outline)
  - Mammalogy
  - Malacology
    - Conchology
  - Myrmecology (outline)
  - Nematology
  - Neuroethology
  - Oology
  - Ornithology (outline)
  - Planktology
  - Primatology
  - Zootomy
  - Zoosemiotics

## **Chemistry**

- Agrochemistry
- Analytical chemistry
- Astrochemistry
- Atmospheric chemistry
- Biochemistry (outline)
- Chemical biology
- Chemical engineering (outline)
- Cheminformatics
- Computational chemistry
- Cosmochemistry
- Electrochemistry
- Environmental chemistry
- Femtochemistry
- Flavor
- Flow chemistry
- Geochemistry
- Green chemistry

- Histochemistry
- Hydrogenation
- Immunochemistry
- Inorganic chemistry
- Marine chemistry
- Mathematical chemistry
- Mechanochemistry
- Medicinal chemistry
- Molecular biology
- Molecular mechanics
- Nanotechnology
- Natural product chemistry
- Neurochemistry
- Oenology
- Organic chemistry (outline)
- Organometallic chemistry
- Petrochemistry
- Pharmacology
- Photochemistry
- Physical chemistry
- Physical organic chemistry
- Phytochemistry
- Polymer chemistry
- Quantum chemistry
- Radiochemistry
- Solid-state chemistry
- Sonochemistry
- Supramolecular chemistry
- Surface chemistry
- Synthetic chemistry
- Theoretical chemistry
- Thermochemistry

## **Earth science**

- Edaphology
- Environmental chemistry
- Environmental science
- Gemology
- Geochemistry
- Geodesy
- Physical geography (outline)
  - Atmospheric science / Meteorology (outline)
  - Biogeography / Phytogeography
  - Climatology / Paleoclimatology / Palaeogeography

- Coastal geography / Oceanography
- Edaphology / Pedology or Soil science
- Geobiology
- Geology (outline) (Geomorphology, Mineralogy, Petrology, Sedimentology, Speleology, Tectonics, Volcanology)
- Geostatistics
- Glaciology
- Hydrology (outline)/ Limnology / Hydrogeology
- Landscape ecology
- Quaternary science
- Geophysics (outline)
- Paleontology
  - Paleobiology
  - Paleoecology

## **Space sciences**

- Astrobiology
- Astronomy (outline)
  - Observational astronomy
    - Gamma ray astronomy
    - Infrared astronomy
    - Microwave astronomy
    - Optical astronomy
    - Radio astronomy
    - UV astronomy
    - X-ray astronomy
- Astrophysics
  - Gravitational astronomy
    - Black holes
- Interstellar medium
- Numerical simulations
  - Astrophysical plasma
  - Galaxy formation and evolution
  - High-energy astrophysics
  - Hydrodynamics
  - Magnetohydrodynamics
  - Star formation
- Physical cosmology
- Stellar astrophysics
  - Helioseismology
  - Stellar evolution

- Stellar nucleosynthesis
- Planetary science

## Physics

- Acoustics
- Aerodynamics
- Applied physics
- Astrophysics
- Atomic, molecular, and optical physics
- Biophysics (outline)
- Computational physics
- Condensed matter physics
- Cryogenics
- Electricity
- Electromagnetism
- Elementary particle physics
- Experimental physics
- Fluid dynamics
- Geophysics (outline)
- Mathematical physics
- Mechanics
- Medical physics
- Molecular physics
- Newtonian dynamics
- Nuclear physics
- Optics
- Plasma physics
- Quantum physics
- Solid mechanics
- Solid state physics
- Statistical mechanics
- Theoretical physics
- Thermal physics
- Thermodynamics

## Formal Sciences

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### Computer Science

*Also a branch of electrical engineering*

- Logic in computer science
  - Formal methods (Formal verification)
  - Logic programming

- Multi-valued logic
  - Fuzzy logic
- Programming language semantics
- Type theory
- Algorithms
  - Computational geometry
  - Distributed algorithms
  - Parallel algorithms
  - Randomized algorithms
- Artificial intelligence (outline)
  - Cognitive science
    - Automated reasoning
    - Computer vision (outline)
    - Machine learning
      - Artificial neural network
      - Support vector machine
    - Natural language processing (Computational linguistics)
  - Expert systems
  - Robotics (outline)
- Data structures
- Computer architecture
- Computer graphics
  - Image processing
  - Scientific visualization
- Computer communications (networks)
  - Cloud computing
  - Information theory
  - Internet, World Wide Web
  - Ubiquitous computing
  - Wireless computing (Mobile computing)
- Computer security and reliability
  - Cryptography
  - Fault-tolerant computing



- Computing in mathematics, natural sciences, engineering, and medicine
  - Algebraic (symbolic) computation
  - Computational biology (bioinformatics)
  - Computational chemistry
  - Computational mathematics
  - Computational neuroscience
  - Computational number theory
  - Computational physics
  - Computer-aided engineering
    - Computational fluid dynamics
    - Finite element analysis
  - Numerical analysis
  - Scientific computing (Computational science)
- Computing in social sciences, arts, humanities, and professions
  - Community informatics
  - Computational economics
  - Computational finance
  - Computational sociology
  - Digital humanities (Humanities computing)
  - History of computer hardware
  - History of computer science (outline)
  - Humanistic informatics
  - Database (outline)
    - Distributed database
    - Object database
    - Relational database
  - Data management
  - Data mining
  - Information architecture
  - Information management
  - Information retrieval
  - Knowledge management
  - Multimedia, hypermedia
    - Sound and music computing
- Distributed computing
  - Grid computing
- Human-computer interaction
- Operating systems
- Parallel computing
  - High-performance computing

- Programming languages
  - Compilers
  - Programming paradigms
    - Concurrent programming
    - Functional programming
    - Imperative programming
    - Logic programming
    - Object-oriented programming
  - Program semantics
  - Type theory
- Quantum computing
- Software engineering
  - Formal methods (Formal verification)
- Theory of computation
  - Automata theory (Formal languages)
  - Computability theory
  - Computational complexity theory
  - Concurrency theory
- VLSI design

## **Mathematics**

### **Pure mathematics**

- Mathematical logic and Foundations of mathematics
  - Intuitionistic logic
  - Modal logic
  - Model theory
  - Proof theory
  - Recursion theory
  - Set theory

- Algebra (outline)
  - Associative algebra
  - Category theory
    - Topos theory
  - Differential algebra
  - Field theory
  - Group theory
    - Group representation
  - Homological algebra
  - K-theory
  - Lattice theory (Order theory)
  - Lie algebra
  - Linear algebra (Vector space)
  - Multilinear algebra
  - Non-associative algebra
  - Representation theory
  - Ring theory
    - Commutative algebra
    - Noncommutative algebra
  - Universal algebra
- Analysis
  - Complex analysis
  - Functional analysis
    - Operator theory
  - Harmonic analysis
    - Fourier analysis
  - Non-standard analysis
  - Ordinary differential equations
  - p-adic analysis
  - Partial differential equations
  - Real analysis
    - Calculus (outline)
- Probability theory
  - Ergodic theory
  - Measure theory
    - Integral geometry
  - Stochastic process

- Geometry (outline) and Topology
  - Affine geometry
  - Algebraic geometry
  - Algebraic topology
  - Convex geometry
  - Differential topology
  - Discrete geometry
  - Finite geometry
  - Galois geometry
  - General topology
  - Geometric topology
  - Integral geometry
  - Noncommutative geometry
  - Non-Euclidean geometry
  - Projective geometry
- Number theory
  - Algebraic number theory
  - Analytic number theory
  - Arithmetic combinatorics
  - Geometric number theory

### **Applied mathematics**

- Approximation theory
- Combinatorics (outline)
  - Coding theory
- Cryptography
- Dynamical systems
  - Chaos theory
  - Fractal geometry
- Game theory
- Graph theory
- Information theory
- Mathematical physics
  - Quantum field theory
  - Quantum gravity
    - String theory
  - Quantum mechanics
  - Statistical mechanics
- Numerical analysis

- Operations research
  - Assignment problem
  - Decision analysis
  - Dynamic programming
  - Inventory theory
  - Linear programming
  - Mathematical optimization
  - Optimal maintenance
  - Real options analysis
  - Scheduling
  - Stochastic processes
  - Systems analysis
- Statistics (outline)
  - Actuarial science
  - Demography
  - Econometrics
  - Mathematical statistics
  - Data visualization
- Theory of computation
  - Computational complexity theory

## **Statistics**

- Astrostatistics
- Biostatistics

## **Applied Sciences**

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### **Business**

- Accounting
- Business management
- Finance
- Marketing
- Operations management

### **Engineering and technology**

#### **Chemical Engineering**

- Bioengineering
  - Biochemical engineering
  - Biomolecular engineering
- Catalysis
- Materials engineering

- Molecular engineering
- Nanotechnology
- Polymer engineering
- Process design
  - Petroleum engineering
  - Nuclear engineering
  - Food engineering
- Process engineering
- Reaction engineering
- Thermodynamics
- Transport phenomena

### **Civil Engineering**

- Coastal engineering
- Earthquake engineering
- Ecological engineering
- Environmental engineering
- Geotechnical engineering
  - Engineering geology
- Hydraulic engineering
- Mining engineering
- Transportation engineering
  - Highway engineering
- Structural engineering
  - Architectural engineering
- Structural mechanics
- Surveying

### **Educational Technology**

- Instructional design
  - Distance education
  - Instructional simulation
- Human performance technology
- Knowledge management

### **Electrical Engineering**

- Applied physics
- Computer engineering (outline)
- Computer science
- Control systems engineering
  - Control theory
- Electronic engineering
  - Instrumentation engineering

- Engineering physics
  - Photonics
- Information theory
- Mechatronics
- Power engineering
- Quantum computing
- Robotics (outline)
- Semiconductors
- Telecommunications engineering

### **Materials Science and Engineering**

- Biomaterials
- Ceramic engineering
- Crystallography
- Nanomaterials
- Photonics
- Physical Metallurgy
- Polymer engineering
- Polymer science
- Semiconductors

### **Mechanical Engineering**

- Aerospace engineering
  - Aeronautics
  - Astronautics
- Acoustical engineering
- Automotive engineering
- Biomedical engineering
  - Biomechanical engineering
  - Neural engineering
- Continuum mechanics
- Fluid mechanics
- Heat transfer
- Industrial engineering
- Manufacturing engineering
- Marine engineering
- Mass transfer
- Mechatronics
- Nanoengineering
- Ocean engineering
- Optical engineering
- Robotics
- Thermodynamics

### **Systems science**

- Chaos theory
- Complex systems
- Conceptual systems
- Control theory
  - Affect control theory
  - Control engineering
  - Control systems
  - Dynamical systems
  - Perceptual control theory
- Cybernetics
  - Biocybernetics
  - Engineering cybernetics
  - Management cybernetics
  - Medical cybernetics
  - New Cybernetics
  - Second-order cybernetics
  - Sociocybernetics
- Network science
- Operations research
- Systems biology
  - Computational systems biology
  - Synthetic biology
  - Systems immunology
  - Systems neuroscience
- System dynamics
  - Social dynamics
- Systems ecology
  - Ecosystem ecology
- Systems engineering
  - Biological systems engineering
  - Earth systems engineering and management
  - Enterprise systems engineering
  - Systems analysis
- Systems psychology
  - Ergonomics
  - Family systems theory
  - Systemic therapy



- Systems theory
  - Biochemical systems theory
  - Ecological systems theory
  - Developmental systems theory
  - General systems theory
  - Living systems theory
  - LTI system theory
  - Mathematical system theory
  - Sociotechnical systems theory
  - World-systems theory
- Systems theory in anthropology

## **Medicine and health**

- Alternative medicine
- Audiology
- Clinical laboratory sciences/Clinical pathology/Laboratory medicine
  - Clinical biochemistry
  - Cytogenetics
  - Cytohematology
  - Cytology (outline)
  - Haemostasiology
  - Histology
  - Clinical immunology
  - Clinical microbiology
  - Molecular genetics
  - Parasitology
- Clinical physiology
- Dentistry (outline)
  - Dental hygiene and epidemiology
  - Dental surgery
  - Endodontics
  - Implantology
  - Oral and maxillofacial surgery
  - Orthodontics
  - Periodontics
  - Prosthodontics
- Dermatology
- Emergency medicine (outline)
- Epidemiology
- Geriatrics
- Gynaecology
- Health informatics/Clinical informatics
- Hematology
- Infectious disease

- Intensive care medicine
- Internal medicine
  - Cardiology
    - Cardiac electrophysiology
  - Endocrinology
  - Gastroenterology
  - Hepatology
  - Nephrology
  - Neurology
  - Oncology
  - Pulmonology
  - Rheumatology
- Medical toxicology
- Music therapy
- Nursing
- Nutrition (outline) and dietetics
- Obstetrics (outline)
- Occupational hygiene
- Occupational therapy
- Occupational toxicology
- Ophthalmology
  - Neuro-ophthalmology
- Optometry
- Otolaryngology
- Pathology
- Pediatrics
- Pharmaceutical sciences
  - Pharmacy
- Physical fitness
  - Group Fitness / aerobics
  - Kinesiology / Exercise science / Human performance
  - Personal fitness training
- Physical therapy
- Physiotherapy
- Podiatry
- Preventive medicine
- Primary care
  - General practice
- Psychiatry (outline)
  - Forensic psychiatry
- Psychology (outline)
- Public health
- Radiology
- Recreational therapy
- Rehabilitation medicine

- [Respiratory therapy](#)
- [Sleep medicine](#)
- [Speech-language pathology](#)
- [Sports medicine](#)
- [Surgery](#)
  - [Bariatric surgery](#)
  - [Cardiothoracic surgery](#)
  - [Neurosurgery](#)
  - [Orthoptics](#)
  - [Orthopedic surgery](#)
  - [Plastic surgery](#)
  - [Trauma surgery](#)
  - [Traumatology](#)
- [Traditional medicine](#)
- [Urology](#)
  - [Andrology](#)
- [Veterinary medicine](#)

## See also

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- [Academia \(outline\)](#)
- [Academic genealogy](#)
- [Curriculum](#)
- [Multidisciplinary approach](#)
- [Interdisciplinarity](#)
- [Transdisciplinarity](#)
- [Professions](#)
- [Classification of Instructional Programs](#)
- [Joint Academic Coding System](#)
- [List of fields of doctoral studies in the United States](#)
- [List of academic fields](#)

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- Abbott, Andrew (2001). *Chaos of Disciplines* (<https://archive.org/details/chaosofdisciplin0023abb>). University of Chicago Press. ISBN 978-0-226-00101-2.
- Oleson, Alexandra; Voss, John (1979). *The Organization of knowledge in modern America, 1860-1920* (<https://archive.org/details/organizationofkn00tes1>). ISBN 0-8018-2108-8.
- US Department of Education Institute of Education Sciences. *Classification of Instructional Programs (CIP)* (<http://nces.ed.gov/ipeds/cipcode/default.aspx?y=55>). National Center for Education Statistics.

## External links

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- [Classification of Instructional Programs \(CIP 2000\)](http://nces.ed.gov/pubs2002/cip2000/) (<http://nces.ed.gov/pubs2002/cip2000/>): Developed by the U.S. Department of Education's National Center for Education Statistics to

provide a taxonomic scheme that will support the accurate tracking, assessment, and reporting of fields of study and program completions activity.

- [Complete JACS \(http://www.hesa.ac.uk/jacs/completeclassification.htm\)](http://www.hesa.ac.uk/jacs/completeclassification.htm) (Joint Academic Classification of Subjects) from [Higher Education Statistics Agency \(HESA\)](#) in the [United Kingdom](#)
- [Australian and New Zealand Standard Research Classification \(ANZSRC 2008\) \(https://web.archive.org/web/20090913104221/http://www.arc.gov.au/pdf/ANZSRC\\_FOR\\_codes.pdf\)](https://web.archive.org/web/20090913104221/http://www.arc.gov.au/pdf/ANZSRC_FOR_codes.pdf) ([web-page \(http://www.abs.gov.au/AUSSTATS/abs@.nsf/Latestproducts/1297.0Contents12008?opendocument&tabname=Summary&prodno=1297.0&issue=2008&num=&view=\)](http://www.abs.gov.au/AUSSTATS/abs@.nsf/Latestproducts/1297.0Contents12008?opendocument&tabname=Summary&prodno=1297.0&issue=2008&num=&view=)) Chapter 3 and Appendix 1: Fields of research classification.
- [Fields of Knowledge \(http://www.thingsmadethinkable.com/item/fields\\_of\\_knowledge.php\)](http://www.thingsmadethinkable.com/item/fields_of_knowledge.php), a zoomable map allowing the academic disciplines and sub-disciplines in this article be visualised.
- [Sandoz, R. \(ed.\), \*Interactive Historical Atlas of the Disciplines\*, University of Geneva \(http://atlas-disciplines.unige.ch/\)](http://atlas-disciplines.unige.ch/)

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