

# EEN Technology Keywords – 2015

<b>ELECTRONICS, IT AND TELECOMMS</b>
<b>Electronics, Microelectronics</b>
Automation, Robotics Control Systems
Digital Systems, Digital Representation
<b>Electronic circuits, components and equipment</b>
Micro and Nanotechnology related to Electronics and Microelectronics
3D printing
Electronic engineering
Embedded Systems and Real Time Systems
High Frequency Technology, Microwaves
Magnetic and superconductor materials/devices
Nanotechnologies related to electronics & microelectronics
Optical Networks and Systems
Peripherals Technologies (Mass Data Storage, Displays)
Printed circuits and integrated circuits
Quantum Informatics
Semiconductors
Smart cards and access systems
<b>Information Processing &amp; Systems, Workflow</b>
Advanced Systems Architecture
Archivistics/Documentation/Technical Documentation
Artificial Intelligence (AI)
Computer Games
Computer Hardware
Computer Software
Computer Technology/Graphics, Meta Computing
Data Processing / Data Interchange, Middleware
Data Protection, Storage, Cryptography, Security
Databases, Database Management, Data Mining
Electronic Commerce, Electronic Payment & Signature
Imaging, Image Processing, Pattern Recognition
Information Technology/Informatics
Internet Technologies/Communication (Wireless, Bluetooth)
Knowledge Management, Process Management
Simulation
Speech Processing/Technology
User Interfaces, Usability
Electronic Signature
Building Automation Software
Remote Control
Smart Appliances
Environmental and Biometrics Sensors, Actuators
Cloud Technologies
Internet of Things
<b>IT and Telematics Applications</b>
Applications for Health
Applications for Tourism

Applications for Transport and Logistics
ASP Application Service Providing
e-Government
Environment Management Systems
GIS Geographical Information Systems
ERP - Electronic Resources Planning
CRM - Customer relationship Management
Quality Management System
Maintenance Management System
Operation Planning and Scheduler System
Didactic System
Serious Games
ICM – Internet Content Management
Analysis Risk Management
Work Hygiene and Safety Management
<b>Multimedia</b>
Cultural Heritage
E-Learning
E-Publishing, Digital Content
Human Language Technologies
Information Filtering, Semantics, Statistics
Visualisation, Virtual Reality
<b>Telecommunications, Networking</b>
Audiovisual Equipment and Communication
Broadband Technologies
Mobile Communications
Narrow Band Technologies
Network Technology, Network Security
Radar
Research Networking, GRID
Satellite Technology/Positioning/Communication in GPS
Signal Processing
Hi-Fi
Description to Sound and Music Computing
Description Image/Video Computing
Communications Protocols, Interoperability
Residential Gateway
VoIP telephony, remote access
<b>INDUSTRIAL MANUFACTURING, MATERIAL AND TRANSPORT</b>
<b>Design and Modelling / Prototypes</b>
3D printing
<b>Industrial Manufacture</b>
Cleaning (sandblasting, brushing)
Coatings
Drying
Erosion, Removal (spark erosion, flame cutting, laser, ..)
Forming (rolling, forging, pressing, drawing)
Hardening, heat treatment
Joining techniques (riveting, screw driving, gluing)
Jointing (soldering, welding, sticking)

Machine Tools
Machining (turning, drilling, moulding, planing, cutting)
Machining, fine (grinding, lapping)
Mixing (powder, etc.), separation (sorting, filtering)
Moulding, injection moulding, sintering
Extrusion
Surface treatment (painting, galvano, polishing, CVD, ..)
Microengineering and nanoengineering
Micromachining, nanomachining
Microassembly, nanoassembly
Micropositioning, nanopositioning
<b>Process control and logistics</b>
Process automation
Manufacturing plants networks
Component integration
Supply chain
Information processing & Systems, Workflow
Prototypes, trials and pilot schemes
<b>Plant Design and Maintenance</b>
<b>Packaging / Handling</b>
Foil, films
Laminate
Packaging for machines
Packaging for materials
Plastic bags
<b>Construction Technology</b>
Materials, components and systems for construction
Construction methods and equipment
Fire Resistance/Safety
Installations related to construction (energy, lighting, ...)
Construction maintenance and monitoring methods & equipment
Construction engineering (design, simulation)
Management of construction process & life
<b>Materials Technology</b>
Adhesives
Building materials
Ceramic Materials and Powders
Colours and varnish
Composite materials
Fine Chemicals, Dyes and Inks
Glass
Iron and Steel, Steelworks
Materials Handling Technology (solids, fluids, gases)
Metals and Alloys
Non-ferrous Metals
Optical Materials
Paper technology
Plastics, Polymers
Properties of Materials, Corrosion/Degradation
Rubber

Stone
Advanced Textile Materials
Lightweight materials
Biobased materials
Carbon nanotubes
Conductive materials
Hybrid materials
Nanomaterials
<b>Transport Infrastructure</b>
Air Transport
Intermodal Transport
Logistics
Railway Transport
Road Transport
Traffic Engineering / Control Systems
Transhipment Systems
Water Transport
<b>Transport and Shipping Technologies</b>
Design of Vehicles
Hybrid and Electric Vehicles
Railway Vehicles
Road Vehicles
Shipbuilding
Traction/Propulsion Systems
Artificial intelligence applications for cars and transport
Navigation and embedded systems
Sensors for cars and transport
Lightweight construction
Air pollution control for cars and transport
Automotive engineering
Body and main parts
Automotive electrical and electronics
Audio / video
Charging system
Electrical supply system
Measurement devices
Ignition system
Lighting and signalling system
Switches and wiring
Security systems
Interior equipment
Powertrain and chassis
Braking system
Energy supply system
Transmission systems
<b>Traffic, mobility</b>
Planning and security
Engineering
System and transportation

<b>Aerospace Technology</b>
Aeronautical technology / Avionics
Aircraft
Helicopter
Satellite Navigation Systems
Space Exploration and Technology
Propulsion
Guidance and control
Thermal insulation for space applications
<b>OTHER INDUSTRIAL TECHNOLOGIES</b>
<b>Other Industrial Technologies</b>
Cleaning Technology
<b>Process Plant Engineering</b>
<b>Apparatus Engineering</b>
<b>Chemical Technology and Engineering</b>
Agro chemicals
Inorganic Substances
Colours, dyes related to Chemical Technology
Electrical Engineering/ Electrical Equipment
Man-made fibres
Organic Substances
Pharmaceutics
Plastics and Rubber related to Chemical Technology
Soaps, detergents
Special chemicals, intermediates
Care, Hygiene, Beauty
<b>Textiles Technology</b>
Component adhesives for strengthening of seam
Dry filling related to Textiles Technology
Dyeing related to Textiles Technology
Finisher related to Textiles Technology
Non weaving related to Textiles Technology
Solvent based glues for strengthening of edges and seam
Textile fibres
Weaving related to Textiles Technology
Woven technical textiles for industrial applications
<b>Footwear / Leather Technology</b>
Dry filling related to Footwear / Leather Technology
Dyes related to Footwear / Leather Technology
Tanned leather process/ Leather Technology
<b>Sound Engineering/Technology</b>
<b>Mining Technologies</b>
<b>Printing</b>
Flexography
Printed Reel Material
<b>Household Goods &amp; Appliances</b>

<b>ENERGY</b>
<b>Energy storage and transport</b>
Heat storage
Heat transport and supply, district heating
Storage of electricity, batteries
Transmission of electricity
Transport and storage of gas and liquid fuels
Transport and storage of hydrogen
Power to gas technology
<b>Energy production, transmission and conversion</b>
Fuel cells
Hydrogen production
Compression and liquefaction of gases
Furnace and boiler technologies
Generators, electric engines and power converters
Heat exchangers
Heat pump
Cooling technologies
Turbines
Combined heat and power (CHP) engines
Micro-generation and grid connection
Other energy related machinery
Smart grids
<b>Fossil Energy Sources</b>
Gaseous fossil fuel
Solid fossil fuel
Liquid fossil fuel
Mining and extraction
<b>Nuclear Fission / Nuclear Fusion</b>
<b>Renewable Sources of Energy</b>
Geothermal energy
Hydropower
Liquid biofuels
Photovoltaics
Solar/Thermal energy
Solid biomass
Waste incineration
Wind energy
Energy from wastewater
Integrated waste-energy processes
Bio-refineries for energy
Waste to energy - other
<b>Biogas and anaerobic digestion (AD)</b>
<b>Energy efficiency</b>
Energy management
Lighting, illumination
Process optimisation, waste heat utilisation
Thermal insulation
Heat pipes
Low, zero and plus energy rating

<b>Other Energy Topics</b>
Combustion, Flames
Fuels and engine technologies
Micro- and Nanotechnology related to energy
<b>Carbon capture and energy</b>
<b>PHYSICAL AND EXACT SCIENCES</b>
<b>Chemistry</b>
Analytical Chemistry
Computational Chemistry and Modelling
Inorganic Chemistry
Organic Chemistry
Petrochemistry, Petroleum Engineering
<b>Meteorology / Climatology</b>
Biosensor
<b>Physics</b>
Vibration and Acoustic engineering
Optics
Vacuum
<b>Separation Technologies</b>
Filtration and Membrane Processes
Extraction
Adsorption
Distillation
Sublimation
<b>Other Processes</b>
<b>Micro- and Nanotechnology</b>
<b>BIOLOGICAL SCIENCES</b>
<b>Medicine, Human Health</b>
Biostatistics, Epidemiology
Clinical Research, Trials
Cytology, Cancerology, Oncology
Dentistry / Odontology, Stomatology
Diagnostics, Diagnosis
Human vaccines
Emergency medicine
Environmental Medicine, Social Medicine, Sports Medicine
Gene - DNA Therapy
Gerontology and Geriatrics
Heart and blood circulation illnesses
Medical Research
Medical Technology / Biomedical Engineering
Neurology, Brain Research
Pharmaceutical Products / Drugs
Physiology
Surgery
Virus, Virology/Antibiotics/Bacteriology
Stem cell Technologies
Physiotherapy, Orthopaedic Technology
Single Use Products and Consumer Goods

Medical Textiles
Medical Furniture
Medical Biomaterials
<b>Biology / Biotechnology</b>
Biochemistry / Biophysics
Cellular and Molecular Biology
Enzyme Technology
Protein Engineering
Genetic Engineering
Synthetic Biology
In vitro Testing, Trials
Microbiology
Molecular design
Toxicology
Bionics
<b>Genome Research</b>
Bioinformatics
Gene Expression, Proteome Research
Population genetics
<b>Micro- and Nanotechnology related to Biological sciences</b>
<b>E-Health</b>
Safety & systems
Sensors & Wireless products
Health information management
Remote diagnostics
<b>Industrial Biotechnology</b>
Biobased Materials
Bioplastics
Biobased chemical building blocks
Biopolymers
Biobased high-performance materials
Biological Nanomaterials
Biolubricants
Biotensides
Ionic Liquids
Bio- Composites
Fermentation
Bioprocesses
Downstream Processing
<b>AGRICULTURE AND MARINE RESOURCES</b>
<b>Agriculture</b>
Agriculture Machinery / Technology
Animal Production / Husbandry
Biocontrol
Crop Production
Horticulture
Pesticides
Precision agriculture
Seed coating
Veterinary Medicine



Micro- and Nanotechnology related to agriculture
<b>Silviculture, Forestry, Forest technology</b>
Forest technology
Paper Technology
Pulp Technology
Silviculture, Forestry
Wood Products
<b>Resources of the Sea, Fisheries</b>
Aquaculture
Fish / Fisheries / Fishing Technology
Marine Science
Micro- and Nanotechnology related to marine resources
<b>AGROFOOD INDUSTRY</b>
<b>Technologies for the food industry</b>
Drink Technology
Food Additives/Ingredients/Functional Food
Food Packaging / Handling
Food Processing
Food Technology
<b>Food quality and safety</b>
Detection and Analysis methods
Food Microbiology / Toxicology / Quality Control
Safe production methods
Traceability of food
<b>Micro- and Nanotechnology related to agrofood</b>
<b>MEASUREMENTS AND STANDARDS</b>
<b>Measurement Tools</b>
Acoustic Technology related to measurements
Analyses / Test Facilities and Methods
Chemical material testing
Electrical Technology related to measurements
Mechanical Technology related to measurements
Optical material testing
Optical Technology related to measurements
Other Non Destructive Testing
Sensor Technology related to measurements
Thermal material testing
<b>Amplifier, A/D Transducer</b>
<b>Electronic measurement systems</b>
<b>Recording Devices</b>
<b>Reference Materials</b>
<b>Standards</b>
Quality Standards
Technical Standards

<b>PROTECTING MAN AND ENVIRONMENT</b>
<b>Safety</b>
Acoustic safety
Assessment of Environmental Risk and Impact
Fire Safety Technology
Hazardous Materials
Radiation Protection
Protection against intoxication
<b>Environment</b>
Indoor Air Pollution/Treatment
Outdoor Air Pollution/Treatment
Capture and Storage of CO <sub>2</sub>
Climate Change mitigation
Biodiversity / Natural Heritage
Ecology
Environmental Engineering / Technology
Measurement and Detection of Pollution
Natural Disasters
Remote sensing technology
Soil and Groundwater Pollution
Remediation of Contaminated Sites
Clean Production / Green Technologies
Noise Pollution
Life Cycle Assessment
<b>Waste Management</b>
Biotreatment / Compost / Bioconversion
Incineration and Pyrolysis
Land and Sea Disposal
Recycling, Recovery
Radioactive Waste
Waste disinfection / detoxification
Waste to Energy /Resource
Landfill mining
Rare Earths Metals Treatment
<b>Water Management</b>
Industrial Water Treatment
Municipal Water Treatment
Wastewater Recycling
Drinking Water
Rain Water
Sludge Treatment / Disposal
Desalination
Water Resources Management
Marine Environment
Hydrology
Flood Management
Water in Buildings
Underground infrastructure

<b>SOCIAL AND ECONOMICS CONCERNS</b>
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Socio-economic models, economic aspects
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Education and Training
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Information and media, society
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Technology, Society and Employment
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Infrastructures for social sciences and humanities
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Citizens participation
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Sports and Leisure
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Creative services
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Creative products
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