

TECHNOLOGY DEFINITIONS

ADVANCED COMPUTING

Technologies that support advanced applications of computers.

Blockchain, Cybersecurity, Internet of things, Semiconductors, Quantum computing, etc.

ENERGY

Technologies that store, transport, manage, convert and use energy.

Biofuels, Electrification, Energy systems, Smart and micro-grids, etc.

ADVANCED PROCESSES

Advanced technologies for processing and production.

Advanced joining & forming, Nanomanufacturing, Biomanufacturing, etc.

EXTENDED REALITY / FUTURE INTERNET

Technologies that enhance or replace our view of the world.

Augmented reality, Virtual reality, Virtual worlds, Metaverse, etc.

ARTIFICIAL INTELLIGENCE & DATA

Technologies that leverage computers and data to solve problems and make decisions.

Autonomous vehicle, Computer visions, Speech recognition, Virtual agents, etc.

MATERIALS

Technologies to develop, process and use materials.

Circular materials, Low carbon materials, Nanotechnology, Smart materials, etc.

CHEMISTRY

Technologies that use chemical properties and interactions.

Carbon capture/utilization, Pharmaceuticals, Synthetic foods, Vaccines, etc.

ROBOTICS

Technologies that enable machines to perform physical tasks.

E.g. Automated construction, Automated mining, Drones, Robotic surgery, etc.

BIOTECHNOLOGY

Technologies that use biological organisms, systems, or processes.

Biomass, Biomining, Gene technologies, Synthetic biology, etc.

SENSORS

Technologies that detect or measure physical properties.

E.g. Acoustic sensors, Biosensors, Quantum sensors, etc.