

Research in Baden-Württemberg – STRATEGIC RESEARCH TOPICS

BIOECONOMY	energy generation through biomethanol from waste water, microalgae for human diets, new chemical substances, skills network for sustainable, efficient biosynthesis	University of Freiburg University of Hohenheim University of Konstanz University of Stuttgart
ELECTROMOBILITY AND LIGHTWEIGHT VEHICLE ENGINEERING	In order to make electromobility more affordable and available for everyday use, research projects are looking at improving performance and range, reducing charging times, and achieving improved energy and cost efficiency in electric vehicles	Fraunhofer Institute for Chemical Technology (ICT) Centre for Solar Energy and Hydrogen Research B-W (ZSW) Cluster Electric Mobility South-West
ENERGY	New storage technologies, regional self-supply of renewable energies, their integration in electricity generation	University of Freiburg University of Hohenheim Karlsruhe Institute of Technology (KIT) Fraunhofer Institute for solar energy systems (ISE)
HUMANITIES AND SOCIAL SCIENCES	social policy issues: inter-generational integration of migrants, international jurisdiction, analysis of political communication and networked working environments (phenomena of ubiquitous working UW from the perspective of economics, media psychology, occupational psychology, occupational medicine and sociology)	University of Mannheim Max Planck Institute for Comparative Public Law and International Law Centre for European Economic Research (ZEW) University of Konstanz
INDUSTRY 4.0	Research projects are looking at optimising machine communication, innovative control systems, a central IT platform and the largest research factory in Europe as a model for 4.0 production	University of Stuttgart Baden-Württemberg Cooperative State University, Mosbach Fraunhofer Institute for Manufacturing Engineering and Automation (IPA) Fraunhofer Institute of Optronics, System Technologies and Image Exploitation (IOSB)
LIGHTWEIGHT ENGINEERING	Reducing weight saves energy and money. In the field of lightweight and ultra lightweight engineering researchers work on developing new materials that can be used in mechanical engineering, energy and automotive technology to save precious resources	University of Stuttgart Universities of Aalen, Mannheim and Ulm Institute of Textile Chemistry and Chemical Fibres of the German Institute for Textile and Fibre Research Denkendorf (ITCF)
AEROSPACE ENGINEERING	emission-free flying, alternative fuels, highly resistant fibres, reducing risk in air and space travel	University of Stuttgart Fraunhofer Institute for High-Speed Dynamics, Ernst Mach Institute (EMI)
MEDICINE AND MEDICAL TECHNOLOGY	Research is being carried out into the fastest nanoscope in the world, the very latest imaging methods, bio-electronic micro implants for the treatment of diabetes, and personalised medicine	University of Tübingen University of Furtwangen German Cancer Research Center (DKFZ)