

UofS-funded Student Opportunities (Fall 2014)

Program	Research project(s)
Animal and Poultry Science	Response of Feed Molecular Structure to Processing in Relation to Nutrient Utilization and Availability in Animals
Biochemistry	Structural and functional study of helicases linked to cancers
Biology	Neural control of insect flight
Biomedical Engineering	Computational Systems Biology
Biostatistics	Pharmacoepidemiology
Chemical and Biological Engineering	Lifecycle Sustainability Analysis of Infrastructures
Chemical and Biological Engineering	Catalysis and Chemical Reaction Engineering
Chemical Engineering	Environmental catalysis
Chemical Engineering	Fluidized bed drying; biomass gasification
Chemical Engineering	Environment control of animal barns, greenhouses, industrial buildings
Chemistry	Biodegradable polymers, gold chemistry, homogeneous catalysis
Chemistry	Projects in the area of synthetic organometallic chemistry
Chemistry	Organocatalysis, organic synthesis
Chemistry	Design of Nanoparticle Catalysts; X-ray Absorption Spectroscopy at CLS; Nanoparticle Catalysis in Ionic Liquid Solvents
Civil Engineering	Experimental investigations related to reinforced concrete and masonry members and structures
Community and Population Health Sciences	Environments (built, physical, social, cultural) and child health
Computer Science	Genomics, bioinformatics, hci, cloud computing
Computer Science	Simulation modeling, Data Science/Machine Learning with Health Applications
Computer Science	Mobile Computing, Cloud Computing, Internet of Things (IOT)
Computer Science	Bioinformatics, immuno-informatics, computational biology

Program	Research project(s)
Computer Science	Scientific computing
Computer Science	JIT and web-based languages (JavaScript); Formal Software Validation: especially Coq; language semantics and modularity (Aspect-Oriented Programming)
Electrical Engineering	Computer engineering, computer architecture, computer arithmetic, biomedical engineering
Food Science	Biosynthesis of bioactive compounds in plant or microorganism
Food Science	1. Food protein-polysaccharide interactions, 2. Extrusion, 3. Protein modification
Food Science	Quality of lamb meat, meat processing and oxidative stability, chicken meat quality
Geological Sciences	1. Mineral deposits, 2. EPR/ESR spectroscopy, 3. first-principles calculations of minerals, 4. speciation of heavy metals and radionuclides in minerals
Global Institute for Water Security	Water Security: Climate Change, Land-use Management, Sustainable Development of Natural Resources, Socio-hydrology, Water and Health, Water and Wastewater Treatment, and Groundwater and Hydrogeology
Kinesiology	Exercise physiology, aging, physical activity and muscle/bone health, metabolic syndrome, diabetes
Mechanical Engineering	Relating to nanostructured thin films/coatings and carbon based nanostructures
Mechanical Engineering	Machine vision and image analysis in plant and animal systems; modelling light interaction in plant canopies; spectroscopy
Mechanical Engineering	Scaffold Bio-Fabrication, Tissue Engineering, Mechatronics, and Nano-Positioning
Philosophy	All areas of Philosophy
Physics and Engineering Physics	Theoretical Plasma Physics, Space Plasmas, Magnetic Fusion, Computational Plasma Physics, Plasma Sources, Electric Propulsion
Physics and Engineering Physics	Materials Science with synchrotron radiation

Program	Research project(s)
Psychiatry	Neuropharmacology, neurochemistry, behavior neuroscience
School of Environment and Sustainability	Community Resilience to Climate Change; Science, Policy and Decision Making Interactions
School of Environment and Sustainability	Understanding and predicting harmful algal blooms
Veterinary Biomedical Sciences	The role of small stress proteins in uterine smooth muscle function during pregnancy (Reproductive Health)
Veterinary Biomedical Sciences	Advanced reproductive technologies, reproductive physiology and endocrinology, testis stem cells, transgenic animals