



ACEC-SK Fields of Specialization

Aerospace

Aerospace

Agriculture

Agricultural Engineering / Agrology | Agricultural Environment Organic Waste disposal in Rural Areas | Drainage Studies / Surveys | Draining and Irrigation Systems / Networks | Farm Buildings | Farm Machinery and Equipment | Farmland Resources: Surveys and Improvement Works | Food Processing and Storage | Grains and Feeds: Drying, Cleaning, Handling, Processing and Storage | Irrigation | Land Drainage | Nutrient Management | Rural Planning and Development | Water and Soil Conservation Engineering

Building Science

Acoustics | Architecture | Capital Planning | Ergonomics | Fire Protection / Prevention | Indoor Air Quality | Inspections / Investigations | LEED - Leadership in Energy and Environmental Design | Preliminary / Final Design | Repair / Restoration | Residential | Roofing and Waterproofing | Technical Audits | Walls and Cladding | Windows

Chemical Engineering

Desalination | Food Processing | Plastics | Process Design | Synthetic Fibres

Cold Climate Engineering

Building Design for Arctic Conditions | Diesel Power Generation | Ice Core Dams | Ice Road Design | Permafrost Investigations | Petroleum, Oil and Lubricant Storage and Handling | Thermosyphons

Communications / Telecommunications

AM/FM Broadcasting | Data Transmission Systems | Fibre Optics | Program Production Facilities | Terrestrial and Satellite Links | TV and CATV | Wireless Systems

Computer Science

Client / Server | Computational Mechanics | Controls | Database Management | Ergonomics | Internet / Intranet | Process Automation | Robotics | Software Development



Electrical

[Alarm and Security Systems](#) | [Building Systems](#) | [Energy Conservation](#) | [Illumination and Lighting](#)
| [Motors and Generators](#) | [Power Transmission and Distribution](#) | [Residential](#)

Energy

[Biomass / Wood](#) | [Co-Generation](#) | [Coal Processing / Transportation](#) | [District Heating and Co-Generation](#) | [Electric Power Generation - Hydroelectric](#) | [Electric Power Generation - Nuclear](#) | [Electric Power Generation - Thermal](#) | [Electric Power Systems Analysis](#) | [Energy Conservation](#) | [Oil and Gas Pipelines](#) | [Oil and Gas Production / Storage / Distribution](#) | [Oil and Gas Refineries / Processing Plants](#) | [Solar Energy](#) | [Steam Power Generation](#) | [Wind Energy](#)

Energy Geoscience

[Coal Bed Methane](#) | [Coal Exploration / Mining](#) | [Energy Reserves](#) | [Petroleum Development](#) | [Petroleum Exploration](#)

Environmental

[Air Quality Management](#) | [Environmental Assessments](#) | [Environmental Litigation Support](#) | [Environmental Site Assessments and Audits](#) | [Groundwater Resources / Hydrogeology](#) | [Industrial Hygiene and Safety](#) | [Industrial Wastewater Treatment](#) | [Laboratory and Treatability Studies](#) | [LEED - Leadership in Energy and Environmental Design](#) | [Mould Studies](#) | [Noise and Vibration](#) | [Physical Environmental Mapping and Analysis](#) | [Record of Site Condition](#) | [Risk Assessment](#) | [Solid / Hazardous Waste Management](#) | [Surface Water Resources](#) | [Underground Storage Tank Management](#)

Environmental Geoscience

[Hydrogeology and Groundwater](#) | [Terrain Analysis / Remote Sensing](#) | [Waste Management / Mitigation / Disposal](#)

Fisheries

[Fish By-products: Processing](#) | [Fish Processing / Storage](#) | [Fishery Resources: Evaluation, Development, Operations, Aquaculture](#) | [Fishing Vessels Gear / Equipment](#) | [Marine Biology and Oceanography](#) | [Maritime / Harbour Engineering, Trans-shipment Equipment](#) | [Monitoring, Control and Surveillance \(MCS\)](#) | [Naval Architecture and Boat Construction](#) | [Remote Sensing](#)



Forensic

[Accident Reconstruction](#) | [Cladding Failures](#) | [Electrical / Mechanical Failures](#) | [Fire and Explosions](#) | [Investigation and Settlement of Claims](#) | [Process Support Facilities](#) | [Product Failures and Liability](#) | [Structural Failures](#) | [Wind and Water Damage](#)

Forestry

[Building Materials: Plywood, Lumber, Manufacturing, etc.](#) | [Forest Harvesting](#) | [Forestry](#) | [Forestry Engineering](#) | [Pulp / Paper Plants, Products](#) | [Pulp, Paper and Fiber Board](#) | [Timber Engineering](#) | [Timber Grading, Wood Species Identification, Wood Damage Assessment](#)

Geophysics

[Mining Geophysics](#) | [Seismic Acquisition / Analysis](#)

Geotechnical

[Aggregate Exploration and Evaluation](#) | [Earth Structures](#) | [Foundations](#) | [Geohazard Mapping](#) | [Laboratory Testing](#) | [Site Investigations](#) | [Soil and Rock Mechanics](#) | [Soil Stabilization](#)

Industrial

[Ergonomics](#) | [Hydraulic Engineering](#) | [Machine Design / Analysis](#) | [Manufacturing Facilities](#) | [Materials Handling](#) | [Materials Storage](#) | [Plant Maintenance](#) | [Product and Process Design](#) | [Prototyping and Product Development](#) | [Time Motion Studies](#) | [Transportation / Automotive Equipment](#)

Marine and Coastal

[Erosion Protection](#) | [Marinas](#) | [Ports and Terminals](#) | [Shore Erosion Processes and Assessment](#) | [Underwater Surveys](#) | [Waterfront Planning](#)

Materials

[Analysis](#) | [Corrosion Control and Remediation](#) | [Design and Selection](#) | [Quality Issues](#) | [Specifications and Manuals](#) | [Testing and Certification](#) | [Welding](#)

Mechanical

[Computational Fluid Dynamics](#) | [Computer Aided Engineering](#) | [Cranes and Derricks](#) | [Finite Element Analysis](#) | [Fire Protection Systems](#) | [Heating, Ventilation, A/C](#) | [Machine Design](#) | [Plumbing and Piping](#) | [Refrigeration](#) | [Residential](#) | [Software development](#)



Mineral Geoscience

[Mineral Exploration](#) | [Mineral Reserves](#) | [Mining Geology](#) | [Rock Mechanics](#)

Mining Engineering

[Blasting Control](#) | [Iron and Steel Works - Rolling / Casting / Forging / etc.](#) | [Metallurgy Extractive - Ferrous Metals](#) | [Metallurgy Extractive - Non-Ferrous Metals](#) | [Metals / Minerals / Ore Dressing](#) | [Non-Ferrous Metals - Fabricating / Rolling / Forging / Casting / Extruding / etc.](#) | [Open Pit / Underground Mining](#)

Municipal

[Infrastructure Rehabilitation](#) | [Residuals Management](#) | [Roads and Streets](#) | [Stormwater Management](#) | [Wastewater Collection and Treatment](#) | [Wastewater Management](#) | [Water Supply and Treatment](#)

Occupational Health and Safety

[Area Classifications - Electrical](#) | [Area Classifications - Hazardous](#) | [Area Classifications - Industrial](#) | [Pre-start Health and Safety Reviews](#)

Petroleum Engineering

[Acquisitions and Divestitures](#) | [Evaluations](#) | [Expert Witness](#) | [Exploitation](#) | [Feasibility Studies](#) | [Reservoir Engineering](#) | [Well Test Analysis](#)

Planning

[Drainage Studies](#) | [Industrial Parks](#) | [Land Use](#) | [Site Plans](#) | [Subdivision Plans](#) | [Urban and Rural Design](#)

Pressure Vessels

[Design Modifications](#) | [Process Piping Design](#)

Project Management

[Construction Management](#) | [Construction Quality Control](#) | [Contract Administration](#) | [Management of Design](#) | [Procurement Management](#) | [Project Control and Risk Management](#) | [Related Management Services](#) | [Value Engineering](#)

Research

[Feasibility Studies](#) | [Technology Assessment](#)



Structural - Buildings

[Commercial](#) | [Foundations](#) | [Highrise](#) | [Industrial](#) | [Inspections and Investigations](#) | [Institutional](#)
| [Lowrise](#) | [Parking Facilities](#) | [Residential](#) | [Restoration and Repair](#) | [Seismic Retrofit](#)

Structural - Other

[Bridges](#) | [Bunkers and Silos](#) | [Dams and Locks](#) | [Nuclear](#) | [Tanks and Shells](#) | [Towers](#) | [Tunnels](#)

Surveying and Mapping

[Aerial Photography: Photogrammetry / Photo Interpretation / Cartography](#) | [Construction
Layout Surveys](#) | [Geographic Information Systems](#) | [Land Surveying / Cadaster](#) | [Remote Sensing
/ Satellite Data Interpretation / Imagery](#) | [Resource Surveys, Exploration and Planning](#) |
[Surveying](#) | [Topographic Surveys](#)

Temporary Works

[Excavation Enclosures](#) | [Formwork](#) | [Lifting and Moving](#) | [Scaffolding](#) | [Structural Shoring](#)

Transportation

[Airports](#) | [Highway and Road Safety](#) | [Intelligent Transportation Systems](#) | [Long Distance Rail](#) |
[Pavement Design](#) | [Pavement Management Services](#) | [Ports and Harbours](#) | [Roads and
Highways](#) | [Terminals and Service Centres](#) | [Traffic Engineering and Control](#) | [Transportation
Planning](#) | [Urban Public Transit](#)