FOOD PROCESS ENGINEERING
SA Endowed Chair

Introduction
The Saskatchewan food processing industry is expanding and continued growth requires focused research to develop new technologies and products that meet processor requirements and consumer demand. Targeted research and development in food process engineering will help create new food products and processes that increase the application, use and value of Saskatchewan commodities and ingredients.

The Chair in Food Process Engineering will be a joint appointment with the primary appointment in the Department of Agriculture and Bioresource Engineering in the College of Engineering and secondary appointment in the Department of Food and Bioproduct Sciences in the College of Agriculture and Bioresources.

Goal
To increase the value of the Saskatchewan food processing industry.

Research and Program Activities

- Conduct research to develop and assess new food processing techniques, equipment and control mechanisms that impact quality, composition, and functionality of Saskatchewan commodities and food ingredients;
- Conduct research on modeling and optimization of food processing operations;
- Conduct research on the development and assessment of new techniques for food storage and preservation Conduct research on the development of new processing techniques for extraction of high-value products from (or for) Saskatchewan-based products;
- Conduct engineering research in response to needs as identified by Saskatchewan Agriculture, other researchers and the Saskatchewan food processing industry;
- Collaboration with other scientists, industry and industry organizations in the area of food science and food engineering;
- Teach graduate and undergraduate courses; and
- Supervise graduate students.

Program Outputs

- New methodology, techniques and processes to develop high-value food products from Saskatchewan commodities;
- New methodology, techniques and processes to develop improved food ingredients with enhanced functionality;
- Novel applications in food processing technology adopted by industry;
- Scientific and peer-reviewed manuscripts on food process engineering; and
- Undergraduate and graduate level food process engineering courses.

Desired Outcomes

- Scientific and engineering knowledge and understanding of the effects of processing technologies on food ingredients derived from and for Saskatchewan grown commodities;
- A recognized research program with local expertise in global technologies and practices in support of the Saskatchewan food processing industry;
- Increased value of the Saskatchewan food processing industry; and
- Highly qualified people (HQP) at the undergraduate, graduate and technical levels with increased understanding and expertise in food process engineering.