

*It's not ALL about farming.*



UNIVERSITY  
OF MANITOBA

## **New Program in Bachelor of Science (Agriculture) PLANT BIOTECHNOLOGY**

### **Program Description**

The Plant Biotechnology Program has replaced the former Plant Systems Program in the Bachelor of Science (Agriculture) degree. Students in this new option will study the sciences and advanced biotechnologies used in the improvement, protection and utilization of agricultural and horticultural crops.

The program is designed for students seeking careers that require advanced technical and scientific knowledge of plants. Students will take courses in plant genetics, physiology and pathology, and will specialize in one of these areas in their third year. The program will continue to emphasize a fundamental knowledge of crop plants and crop production, but will provide an increased emphasis on biotechnologies used in breeding, disease analysis and knowledge development through research.

### **Careers**

Students graduating from the Plant Biotechnology Program will have

- A broad general knowledge of western Canadian production agriculture
- A primary knowledge of agricultural plant sciences
- Extensive knowledge and practical experience in one or more focal areas of plant science and related current biotechnologies
- An appreciation of the ethical and business issues that relate to biotechnology in agriculture
- Oral and written communication skills

Graduates will find careers with research organizations, research support industries, agricultural extension services involved in crop diagnostic evaluations and will be well-prepared to pursue graduate studies.

### **Course of study**

During the program students will take:

- Plant biotechnology
- Principals of ecology
- Biology and microbiology
- Biochemistry
- Genetics and genomics
- Physiology
- Pathology
- Ethics and issues in biotechnology
- Communications

### **Admission information**

To enter the Bachelor of Science (Agriculture) degree program, students must complete a minimum of 24 credits hours (with a minimum cumulative grade point average of 2.00) in the University 1 program. Recommended U1 courses include chemistry, economics, mathematics, biology and agriculture.

High school pre-requisites include Chemistry 40S and Math 40S (Pre-Calculus).

### **Contact information**

For more information contact us at:

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Visit us on the web at:  
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Just a few of the many careers available to graduates of the Faculty of Agricultural and Food Sciences.