

Required Courses

Bachelor of Digital Agriculture Degree

YEAR 3 | TERM 1

1	<p>AGT 3000 - Precision Feeding and Monitoring Systems for Livestock</p> <p>Students will develop an understanding of the role that precision agriculture plays in animal feeding operations, environmental controls for animal production, response of animals to the environment, ventilation, water, feed handling, treatment, air pollution, odour, and waste management systems. Systems will be examined from the perspective of sustainability, optimization, and animal welfare.</p> <p><i>Pre-req: AGF 1000 - Survey of Agriculture and Food Systems in Rural and Urban Environments</i></p>
2	<p>BDA 3999 - Preparation for Professional Internship</p> <p>Students will identify a career pathway that facilitates the application of personal and professional development. This will be accomplished through personal reflection; research into industry and associated organizations; the acquisition and curation of industry partnerships; the development of networking strategies; and the creation of hiring documents and an internship learning plan. By the end of this course, students will have secured an internship placement within industry.</p> <p><i>Pre-req: MGL 2100 - Foundations in Professional Leadership and Learning (or similar transfer course)</i></p>
3	<p>AGF 3000 - Agriculture Leadership in Global Food Systems</p> <p>Students will get a macro-level look at how, where, and why food is produced and the global food systems that drive production. Through examination of trends and innovations, students will develop an awareness of global leadership practices in digital agriculture and food systems.</p>
4	<p>AGT 3110 - Precision Farming Systems</p> <p>Students will develop an understanding of how technology offers the opportunity to enhance and optimize various agricultural practices by examining global precision farming techniques. Students will engage in an analysis of methods using a systems perspective.</p> <p><i>Co-req or Pre-req: AGT 2110 - Automation in Digital Agriculture</i></p>

5	<p>COM 3000 - Translating and Communicating Technology Solutions</p> <p>Students will develop a repertoire of skills to communicate complex technical concepts and solutions to consumers and customers within digital agriculture activities. Students will build upon elements of professional development including self-knowledge, self-regulation, and reflection to monitor their development of this skill-set.</p> <p><i>Pre-req: COM 2100 - Applied Composition</i></p>
YEAR 3 TERM 2	
1	<p>AGT 3510 - Integrating Precision Farming Systems in the Field</p> <p>Students will engage in a technically oriented application of systems thinking, integrating current off-the-shelf solutions with a real-world context. Students will also analyze this application using research processes and procedures and articulate the lessons learned.</p> <p><i>Pre-req: AGT 3110 - Precision Farming Systems</i> <i>Pre-req: AGT 1510 - Experiencing Technology</i></p>
2	<p>AGI 3000 - Global Perspectives in Agriculture</p> <p>Students will examine issues related to digital agriculture and food systems on a global level. Issues will be explored from the perspective of environmental impacts, social impacts, and economic impacts. Students will examine the perspectives of Indigenous peoples regarding agricultural land use on a global level. Students will develop an understanding of how exponential technologies converge with global challenges.</p>
3	<p>AGT 3200 - Applied Research in Agriculture Technology</p> <p>Students will engage in an applied research project, following established processes and protocols for academic research within the context of agricultural technology.</p>
4	<p>AGT 3300 - Responsible Agricultural Innovation</p> <p>Students will research, discuss, and reflect on selected topics in agriculture innovation and technology regarding environmental, social, and economic impacts. They will develop a framework for responsibly innovating an emergent agricultural technology. This seminar course allows for external presenters/content to facilitate conversations with diverse perspectives.</p>
5	<p>AGI 3150 - Indigenous Perspectives Towards Land Use and the Impacts of Colonization</p> <p>Students will examine the perspectives of Indigenous Peoples with regard to land use and</p>

sustainability within Canadian contexts. Students will select this course based on self-identified professional development and leadership goals.

INTERNSHIP - Minimum of 400 hours over 4 months

BDA 4999 - Internship

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Based on a model of self-directed learning in a mentored workplace setting, students will gain practical experience, achieve specific outcomes identified in the "Preparation for Professional Internship" course, and expand contacts in their professional network. Students will further develop skills in leadership, communication, project management, and data collection while participating in a workplace environment. The industry placement must be a minimum of 400 hours.

Pre-req: BDA 3999 - Preparation for Professional Internship