

At UNM Valencia, students majoring in Agriculture might find the following introductory information technology and computer science courses beneficial for complementing their studies:

1. **Introduction to Computer Science (CSCI 101):** This course typically covers the fundamental concepts of computer science, including programming principles, algorithms, and problem-solving techniques. Students may learn basic programming languages like Python or Java.
2. **Introduction to Information Technology (IT 101):** This course introduces students to the essential concepts of information technology, such as computer hardware, software, networking, and data management. It may also cover topics like cybersecurity and information systems.
3. **Data Science Fundamentals (CSCI/IT 120):** As agriculture increasingly relies on data-driven decision-making, this course can be valuable. It covers the basics of data analysis, visualization, and interpretation using tools like Excel, Python libraries (e.g., pandas, matplotlib), and introductory statistical methods.
4. **Web Development (IT 130):** Understanding web development basics can be advantageous, especially if agriculture students want to create websites for their projects or businesses. This course typically covers HTML, CSS, and JavaScript, along with principles of web design and development.
5. **Introduction to Geographic Information Systems (GIS 150):** GIS technology is highly relevant in agriculture for tasks like spatial analysis, crop management, and precision farming. This course introduces students to GIS software and its applications in agriculture and environmental sciences.
6. **Database Fundamentals (IT 145):** Given the increasing importance of data management in agriculture, this course provides a foundation in database concepts, SQL (Structured Query Language), and database design. Students learn how to create, query, and manage databases to store and retrieve agricultural data efficiently.
7. **Introduction to Programming (CSCI 152):** For students interested in learning more about programming beyond the basics, this course offers a deeper dive into programming concepts and techniques. It may cover topics like control structures, functions, and object-oriented programming principles.
8. **Introduction to Cybersecurity (IT 160):** With the growing digitalization of agricultural processes, understanding cybersecurity basics is crucial to protect sensitive agricultural data and infrastructure. This course introduces students to common cybersecurity threats, principles, and best practices.