

Minor in Precision Agriculture & Land Management Systems (Non-Teaching)

Precision agriculture and land management systems (PALMS) is a unique program at Montana State University designed to address instruction in data intensive agricultural sciences. The program is designed to serve those that see their future in the development of precision land management technologies, those that will provide land management services to farm, ranch and land management enterprises as well as those end users that will consume these products in their future enterprises. This minor is designed to serve science and engineering students.

Program Learning Outcomes

- Graduates will be able to efficiently apply and manage precision technologies to farm, ranch, and/or natural resource settings.
- Graduates will be able to evaluate social, economic, and environmental benefits of applying data intensive systems to land management systems.
- Graduates will be able to adapt future technologies to land management systems whether that be for management of farm, ranch or natural resources.
- Graduates will be aware of what future technologies are developing and how they will affect decision making processes in the future.

Background (Required):

CSCI 107	Joy and Beauty of Computing	3
ENSC 245IN	Soils	3
AGSC 356	Plant Nutrition and Soil Fertility Management	3
AGTE 252	Concepts in Precision Agriculture	3

Precision Management Technologies (3 of 4 Required): 9

AGTE 444	Sensing in Agriculture	
AGTE 411	Internet of Things in Precision Agriculture	
AGTE 422	Data Analysis and Management for Digital Agriculture	
ANSC 464	Precision Technology in Livestock Production Systems	

Supporting Topics (Select two): 6

ANSC 222	Livestock in Sustain Systems	
AGSC 341	Field Crop Production	
NRSM 240	Natural Resource Ecology	
EELE 250	Circuits, Devices and Motors	
TE 332	Remote and Autonomous Aircraft Systems	
GPYH 357	GPS Fund/App in Mapping	

Total Credits **27**