

Further Education



"Conduct and management
of farm businesses"



Activity description page

Job Summary

The profession of farm manager and that of highly qualified employee in farming are increasingly technically demanding and require more and more knowledge. They are also increasingly becoming multi-skilled jobs that are rewarding and valued by our society.

The core of the profession remains characterized by the relationship between individual and living organisms and the ability to manage production cycles, whether vegetable or animal, thanks to an acute sense of observation and a global vision of the functioning of the agroecosystem. The farm manager must enjoy working outdoors and in contact with animals and have good physical fitness for outdoor manual work. The job is dependent on climatic conditions, building environmental conditions and events or activities related to the various tasks to be done. He or she often works alone, but can also work as a part of a team, more and more with partners, employees, technicians and neighbouring farmers.

A company manager, as well as a highly qualified employee, must master production techniques and, depending on the orientations chosen, the transformation process and marketing techniques. The act of production also requires the frequent use of a wide variety of agricultural equipment, decision-making tools and expertise in information and communication technologies.

As a business manager and manager when employing hired labour, the farm business manager is a versatile and multi-skilled person who must be able to anticipate and adapt in a rapidly changing context. To this end, he or she must ensure prospective monitoring and seek the best practices and techniques available to progress. Responsible and autonomous, their ability to analyze and manage, to take decisions and to innovate, makes them an entrepreneur. The company manager must be able to listen and dialogue. Their ability to negotiate contracts and contract relevant engagement is essential to ensure the development and integration of the company into the local economic fabric and territory. In some sectors of activity and markets, a good knowledge of a foreign language is an advantage, if not essential.

Significant professional situations

Significant professional situations of competence (SPS) represent the key situations which, if mastered by the holders of the jobs covered by the diploma, reflect all the skills used in the work. These situations are classified by fields of expertise according to the nature of the resources they mobilize and the targeted purpose.

Fields of expertise	SPS	Goals
Strategic management of the farm business and development skills	Choice of productions and services marketed by the company Construction and evaluation of scenarios for possible evolutions of the production and/or marketing system Conducting a change of production and/or marketing system	Enable the company to adapt and innovate in a constantly changing environment while limiting the risks associated with change
Preservation and improvement of soils and functional biodiversity	Diagnosis of soil condition Design of a rotation system Valorization of livestock manure Valorization of vegetal waste	Improve the physical, chemical and biological fertility of soils
Management of production process	Observation and assessment of the agroecosystem condition Integrated management of animal and plant health Operating a fodder system Improving the welfare of farm animals	Achieve production objectives by taking into account changes in agricultural policies, agro-ecology and regulations
Marketing of agricultural products and services	Marketing a product or service Negotiation of a contract (supply, sale or insurance) or investment project Development of a collective project of companies, sectors or territories	Enhance the value of the products and services marketed by the company, taking into account foreseeable market developments and the emergence of new opportunities
Negotiation, discussion and development of a project	Encadrement d'une équipe Gestion des pointes de travail	Ensure the development and integration of the company into the local economic and territorial environment.
Work organization, resource management and human relations	Treasury management Analysis of production costs, gross and net margins Analysis of the company's technical, economic, financial, environmental and social performance	Improve the collective organization of work and human relations within the company
Management and administration of the company	Management of quality processes	Improve the company's economic, social and environmental performance while maintaining or increasing income level



Farm business management

Objectif général du course :

Analyze the functioning of a farm business in its territory.

Objectives of the module

- Objective 1- Characterize the operation of an agricultural enterprise in its territory.
- Objective 2- Identify connections between productions.
- Objective 3- Detect strengths and weaknesses in the company's operations.
- Objective 4- Propose possible ways of developing the company

Presentation of the module, conditions for achieving the objectives

This module aims to understand how farms, in their diversity, are organised, to analyse the results (diagnosis according to the different dimensions of sustainability) and to understand their evolution prospects.

The implementation of the course focuses on concrete cases of agricultural holdings (partner holdings, establishment holdings, internship partners, etc.) based on visits, interviews, surveys, testimonies, etc.

Precisions relating to the objectives

Objective 1- Characterize the operating mode of an agricultural enterprise in its territory

Objective 2- Identify connections between productions

Objective 3- Detect strengths and weaknesses in the company's operations

3.1- Formulate elements for the diagnosis of subsystems

3.2- Formulate enterprise-level diagnostic elements

Objective 4- Propose ways of developing the company

4.1- Identify possible system evolutions

4.2- Consider the consequences of these evolutions on the operating system

MP2

Farm business, markets and territories

Objectif général du course :

Identify the development prospects of the agricultural enterprise in its environment

Objectives of the module

Objective 1- To identify the position of the agricultural enterprise in the economic, regulatory and social environment.

Objective 2- Take into account territorial and collective dynamics.

Objective 3- To analyse practices for the valuation, diversification and marketing of agricultural production

Presentation of the module, conditions for achieving the objectives

This module aims to situate the agricultural enterprise in its economic and social environment in order to identify development opportunities.

Three entries, which do not necessarily constitute a lesson plan, are proposed:

- an approach to the general environment of the farm business that will make it possible to understand the role of public policies that have an impact on its functioning and society's view of agriculture;
- the consideration of the company's territorial integration, its assets and constraints;
- the study of the diversity of practices implemented by companies to enhance their production and/or diversify it.

Precisions relating to the objectives

Objective 1- To locate the agricultural enterprise in the economic, regulatory and social environment

1.1- Characterize the influence of public policies on the agricultural enterprise

1.2- Identify societal expectations of agriculture

Objective 2- Take into account territorial and collective dynamics

2.1- Identify the territory and its actors

2.2- Understand the logic and actions of the different actors in the territory

2.3- Locate the company in territorial and collective actions

Objective 3- To analyse practices for the valuation, diversification and marketing of agricultural production

3.1- Identify the different practices implemented

3.2- Identify the factors that contribute to the diversity of practices

3.3- Understanding marketing tools

MP3

Farm business management

Objectif général du course :

Rationalise the economic, financial and human management of the agricultural enterprise

Objectives of the module

- Objective 1- Interpret accounting documents.
- Objective 2- Carry out the economic and financial diagnoses.
- Objective 3- Reason a decision and a project.
- Objective 4: Understand the modalities of labour and human resources management.
- Objective 5: Identify the fiscal and legal dimensions of the company.
- Objective 6: Take into account the administrative organization of the company.

Presentation of the module, conditions for achieving the objectives

This module must allow the participant:

- to establish, analyse and use the technical, economic and financial results of the operation to regulate and guide its operation;
- acquire tax, legal, work and HR management concepts in order to better understand their impact on business conduct and decision-making.

It is based on the study of concrete cases and on the experience gained during training periods in the workplace. It must be conducted in conjunction with the MP1 module.

Precisions relating to the objectives

Objective 1- : Interpret accounting documents

- 1.1- Locate the origin of accounting documents
- 1.2- 2 Identify the value of accounting documents

Objective 2- Carry out the economic and financial diagnoses

- 2.1- Develop a technical and economic diagnosis of the company
- 2.2- Build a financial diagnosis of the company

Objective 3- Reason a decision and a project

- 3.1- Identify the different steps and tools of decision-making
- 3.2- Understanding the project of running a farm

Objective 4: Understand the modalities of labour and human resources management

- 4.1- Analyze work organization
- 4.2- Understanding the relational dimension in the company
- 4.3- Take into account the social and legal aspects of human resources management

Objective 5: Identify the fiscal and legal dimensions of the company

- 5.1- Identify the basic mechanisms of the different tax systems
- 5.2- Identify the main legal aspects

Objective 6: Take into account the administrative organization of the company

MP4

Sustainable management of resources and agro-ecosystem

Objectif général du course :

Managing resources in a sustainable way to ensure the production of services within an agro-ecosystem.

Presentation of the module, conditions for achieving the objectives

The objective of this module is to show how various resources can be mobilized within agroecosystems to provide a variety of ecosystem services. This module brings together the scientific and technical lessons necessary for the management and control of plant and animal production, but also more generally for the consideration and preservation of common resources. In this module, the term "resources" is therefore used in a very broad sense.

Beyond the sensu stricto contribution of knowledge, this module aims to develop in learners a capacity for a systemic approach; in particular, it involves moving from a "one problem - one solution" approach to a more global one: identifying issues, identifying objectives, building a set of hypotheses, combining levers and solutions with partial effect, taking into account feedback and regulatory mechanisms, etc. Emphasis is also placed on the interactions between crop and livestock production . The elements developed in this module allow in particular the understanding and implementation of different ways of producing; they are intended to be reinvested in the courses on the management of agricultural enterprises (MP1) and on the management of various production processes (MP5).

This module is in itself autonomous in the sense that it addresses real professional issues, in particular the sustainable management of common resources (objective 4). It is therefore essential that this teaching is based on field situations and concrete case studies; as such, the operation of the partner institution or farms constitute privileged supports for the teaching of this module. Multidisciplinarity and periods in the workplace are part of this teaching.

This module brings together the scientific and technical teaching necessary for the management and control of plant and animal production, but also more generally for the consideration and preservation of common resources. In this module, the term "resources" is therefore used in a very broad sense.

The priority study field for this module is polyculture-livestock (MP41), with contents and schedule balanced between agronomy and zootechnics; a field crop support, with a predominance of agronomy, can be proposed at the school's initiative, in specific situations (regions, establishments) where animal production is absent or not very present.

MP41

Resource Management
and agro-ecosystem

Support :
polyculture-livestock farming

Objectives of the module

Objective 1: Identify the main issues related to agro-ecosystems.

Objective 2: Mobilize resources related to crop production.

Objective 3: Mobilize scientific and technical knowledge related to animal production.

Objective 4: Propose improvements in the functioning of an agro-ecosystem that allows for the sustainable management of common resources

Precisions relating to the objectives

Objective 1 : Identify the main issues related to agroecosystems

Objective 2: Mobilize resources related to crop production

2.1- Link the functioning of an agroecosystem and the ecosystem services provided

2.1.1- Characterize the main components of an agroecosystem

2.1.2- Explain the main ecological processes that can be mobilized in agroecosystem management

2.1.3- Propose a schematization of the operating procedures with regard to the expected services

2.2- Identify and organize the main levers for influencing the functioning of an agroecosystem

2.2.1- Identify the main levers that can be used

2.2.2- Carry out a comparative approach concerning the mobilization of levers in different driving logics

Objective 3: Mobilize scientific and technical knowledge related to animal production

3.1- Link the digestive functioning of livestock to the use of available feed

3.1.1- Assess the composition of livestock feed

3.1.2- Compare the mechanisms of digestion between species

3.1.3- Identify the concepts of expenses, needs and recommended contributions

3.1.4- Present the characteristics of a rational diet

3.2- Mobilize scientific and technical knowledge to conduct the reproduction of livestock

3.2.1- Characterize and compare the male and female reproductive systems

3.2.2- Expose the physiology of reproduction and lactation

3.2.3- Justify the techniques for conducting reproduction

3.3- Mobilize the essential notions of genetic improvement to understand its processes.

3.3.1- Describe the heredity of non-quantitative characteristics

3.3.2- Describe the heredity of quantitative characteristics

3.3.3- Present the concepts and approaches of genetic improvement

3.3.4- Define the concepts of pure race and crossbreeding; identify the main types of crossbreeding and justify their use

3.4- Mobilize scientific and technical knowledge to maintain a healthy herd

3.4.1- Locate the importance of health problems and their consequences

3.4.2- Characterize the concepts of disease, health disorder and risk factor

3.4.3- Present the disease's modes of expression and the animal's means of defence

3.4.4- To deal with health management in livestock farming

Objective 4: Propose improvements in the operation of an agro-ecosystem that allows for the sustainable management of common resources

MP42

Resource Management and agro-ecosystem

Support :
field crops

Objectives of the module

Objective 1: Identify the main issues related to agro-ecosystems.

Objective 2: Mobilize resources related to crop production. Objective 3: Mobilize resources related to livestock production.

Objective 4: Propose improvements in the functioning of an agro-ecosystem that allows for sustainable management of common resources.

Precisions relating to the objectives

Objective 1 : Identify the main issues related to agroecosystems

Objective 2: Mobilize resources related to crop production

2.1- Linking the functioning of an agroecosystem and the ecosystem services provided

2.1.1- Characterize the main components of an agroecosystem

2.1.2- Explain the main ecological processes that can be mobilized in agroecosystem management

2.1.3- Propose a schematization of the mechanism with regard to the expected services

2.2- Identify and organize the main levers for influencing the functioning of an agroecosystem

2.2.1- Identify the main levers that can be used

2.2.2- Carry out a comparative approach concerning the mobilisation of levers in different driving logics

Objective 3: Mobilize resources related to livestock production

3.1- Identify the proportion of cereals or protein crops used in animal feed

3.2- Identify the mechanisms of plant biomass transformation by livestock

3.2.1- Establish the relationships between diet and digestion physiology in ruminants and monogastric animals

3.2.2- Present the transformation of plant biomass by animals

3.3- Identify the evolution of the place of livestock in a predominantly crop farm

3.3.1- Remind us of the evolution of field crop farms

3.3.2- Identify the place and impact of livestock farming in a predominantly crop-oriented farm

3.4- Analyze the functioning and results of animal production processes in a predominantly crop farm

3.4.1- Briefly present and analyze the conduct of reproduction and its renewal

3.4.2- Link the crops present on the farm to the herd's feeding management

3.4.3- Analyze the environmental impacts of livestock activities

3.4.4- Identify the elements to control health problems

3.4.5- Reason the conditions of the functionality of a livestock building

3.4.6- Analyze results

Objective 4: Propose improvements in the functioning of an agro-ecosystem that would allow a sustainable management of common resources

MP5

Implementation of a production process

General objective of the module :
Conducting production processes

Presentation of the module, conditions for achieving the objectives

The objective of this module is to provide learners with knowledge, approaches and methods to conduct various animal and plant production processes in a sustainable manner.

The process management methods presented in this course are based, among other things, on the knowledge and tools discussed in the MP4 module, with which it is closely linked. The MP5 module is an opportunity to discuss several "conventional", agro-organic, etc. production and conduct methods; particular attention is paid to conduct based on the principles and approaches related to "agro-ecological".

As such, this module is resolutely action-oriented, at different scales of time and space. It is therefore important that his teaching is constantly based on real situations, and that the pedagogical methods include an important aspect of professional situations in the real world. To this end, the agricultural farm of the training establishment, but also of the partner farms, are privileged supports for all or part of the teaching of this course. The work placements also contribute to the training.

This module includes two versions: one specific to the polyculture-livestock support with contents and a balanced schedule between agronomy and zootechnics (MP51) and one specific to establishments moving towards a "field crops" support, exclusive agronomy schedule (MP52).

It is addressed in a privileged way in connection with multidisciplinary activities

MP51

Implementation of a
production process

Support :
polyculture-livestock farming

Objectives of the module

Objective 1: Conduct a crop production process as part of a cropping system.

Objective 2: Manage a livestock production process as part of a livestock system.

Objective 3: Manage the relationship between a crop production process and a livestock production process

Precisions relating to the objectives

Objective 1 : Conducting a crop production process as part of a cultivating system

- 1.1- Identify the main characteristics of a crop system
- 1.2- Identify living organisms within an agroecosystem
- 1.3- Make technical choices as part of a technical plan
- 1.4- Implement technical operations
- 1.5- Evaluate the performance of an ITK by taking into account different dimensions of sustainability

Objective 2: Manage a livestock production process as part of a livestock system

- 2.1- Take into account the behavioural characteristics specific to the species in order to carry out interventions and manipulations in the management of the farm (animal welfare)
- 2.2- Work on animals in complete safety while respecting animal welfare
- 2.3- Obtain a quality product for marketing
 - 2.3.1- Present the components of product quality and their impact on payment
 - 2.3.2- Identify the quality signs and the value of a product intended for sale
- 2.4- Analyze the conduct of an animal production workshop
 - 2.4.1- Analyze the reproduction process
 - 2.4.2- Analyze the supply line
 - 2.4.3- Manage the renewal of breeding stock for genetic improvement of the herd
 - 2.4.4- Manage animal growth and development and their practical consequences
 - 2.4.5- Analyze herd health management

2.5- Present the technical and economic results of the production workshop and the impacts

2.5.1- Calculate and interpret technico-economic results

2.5.2- Analyze the impacts

2.6- Carry out a diagnosis on livestock buildings and equipment

Objective 3: Manage the relationship between a crop production process and a livestock production process

3.1- Manage material flows between the two processes

3.2- Make choices in the management of prairie areas

MP52

Implementation of a
production process

Support :
field crops

Objectives of the module

- Objective 1: Identify the main characteristics of a cropping system.
- Objective 2: Identify living things within an agroecosystem.
- Objective 3: Make technical choices as part of a technical itinerary.
- Objective 4: Implement technical operations.
- Objective 5: Evaluate the performance of an ITK by taking into account different dimensions of sustainability.

Precisions relating to the objectives

Objective 1: Identify the main characteristics of a cropping system

Objective 2: Identify living things within an agroecosystem

Objective 3: Make technical choices as part of a technical itinerary

Objective 4: Implement technical operations

Objective 5: Evaluate the performance of an ITK by taking into account different dimensions of sustainability

MPE6

Choice, implementation and maintenance of agricultural equipment in a production process

General objective of the module :

Rationalize the choice, implement and maintain equipment in order to optimize its efficiency by taking into account technical, agro- environmental, regulatory and safety constraints.

Objectives of the module

Objective 1- Choose the equipment to be used in a mechanization chain based on functionality and performance criteria.

Objective 2- Implement the equipment with a view to maximizing its technical, economic, safety and environmental impact.

Objective 3- Carry out preventive and corrective maintenance work at level 1 and 2 of the equipment

Presentation of the module, conditions for achieving the objectives

This module aims to provide students with the knowledge and skills necessary to implement an approach and provide the necessary guidance for technical decision-making in the use of agro-equipment involved in the management of production systems (polyculture, livestock and/or field crops).

The teaching of this module must be based on the agricultural farm of the school or any agricultural farm used for training in order to carry out practical course and multidisciplinary activities.

Precisions relating to the objectives

Objective 1: Select the equipment to be used in a mechanization chain based on functionality and performance criteria

- 1.1 Identify the mechanized work to be carried out with their objectives and constraints as part of a production mechanization process.
- 1.2- Identify the equipment and technologies that can be used to carry out mechanized work
- 1.3- State the operating principles of systems designed to improve the accuracy, performance and environmental impact of equipment
- 1.4- Consider the choice of one or more equipment in the context of a production

Objective 2: To deploy the equipment with a view to optimizing its technical, economic, safety and environmental impacts

2.1- Implement agricultural self-propelled vehicles with a view to optimising performance and complying with safety rules

- 2.1.1- Driving a self-propelled vehicle safely
- 2.1.2- Make the tractor-tool connection with a view to optimising performance and safety

2.2- Implement production equipment in order to meet the quality requirements of the operation, the preservation of the environment and the observation of safety rules

- 2.2.1- Prepare the equipment
- 2.2.2- Adapt the equipment to the work to be done and adjust it
- 2.2.3- Perform the operation

2.3- Carrying out a mechanized work site

Objective 3: Carry out preventive and corrective maintenance work at the level of 1 and 2 of the equipment

- 3.1- Check the state of conformity and dangerousness of the equipment in the context of their use
- 3.2- Carry out simple compliance operations
- 3.3- Carry out routine functional and preventive maintenance operations on self-propelled vehicles, machines, buildings and installations
- 3.4- Managing inputs and waste

Ministère de l'agriculture et de l'alimentation
Direction Générale de l'Enseignement et de la Recherche

Sous-direction des politiques de formation et d'éducation
Bureau des diplômés de l'enseignement technique

1er Avenue de Lowendal 75349 PARIS 07 SP