



### Professional skills

The course prepares professional managers for careers in the "Seeds and Plants" sector and more generally in the sectors related to plant breeding. Concepts and methods acquired during training have a general scope in these fields while examples taken illustrate the skills of Montpellier academic teams on Mediterranean and tropical species. The course develops:

- /// Skills to master plant production, varietal selection and development in the seeds and plants sectors;
- /// Know-how to use different tools (statistical, bioinformatics) and methods (biotechnological, genomic);
- /// Capacity to integrate socio-economical, legal and ethical aspects that are particularly important in this sector.

### Career Prospects

The specialization leads to careers in the following fields:

- /// Varietal selection and variety development;
- /// Experimentation;
- /// Innovative product development;
- /// Seed production and distribution;
- /// Quality control.

Professional opportunities exist in private plant breeding, seed and plant production, technical institutes, extension and development services, professional organisations in the plant and seed sector, public research institutes, and international plant genetics and/or breeding research centres. Some of these careers imply to continue with PhD studies at the end of the SEPMET course.

### Course structure and partners

Mediterranean & Tropical Seeds and Plants (SEPMET) is an option of the STIDAD speciality (Systems and Innovative Techniques for Sustainable Agricultural Development) of the Agronomy and Agro-Food Sciences and Technologies Master degree programme. The course consolidates plant science basics and prepares future degree holders to apply this knowledge and these skills to plant breeding applied to different crops (cereal, oil and protein plants, industrial, and/or horticultural crops), which are important in Southern countries but not exclusively.

The Master is a two-year programme (M1 and M2). The first year, M1, is shared with other STIDAD courses and specialities of the 3A Master. The ensemble of professionals in the seeds and plants sectors, in addition to research scientists from CIRAD, INRA, IRD and universities) are the principal contributors to the SEPMET course of study.

Courses are mainly provided in French language but academic resources and manuals are often in English. Internships can be realised abroad.





## Admission requirements

### Initial training

For M1, graduates of a three year degree programme (equivalent to bac+3 – a certificate or BSc degree) in the fields of biology or agronomy. For M2, graduates of a four year degree programme (equivalent of bac+4) or higher in the same fields.

### Continuing education

SEPMET is open to individuals working in the fields of agricultural production, consulting, and the environment, within the framework of their companies' training programme or on an individual training sabbatical.

The validation of skills gained through experience and the organisation of the training course in cumulative units enables the possibility of individualized training pathways adapted to different situations. The training can be spread out over time when needed.

### Admissions

Applications must be submitted before June 15 to the Direction de l'Enseignement et de la Vie Etudiante of Montpellier SupAgro (Office of Education and Student Life, see link below). Admissions are based on applications and as a function of places available.



## Course Programme

The M2 training programme takes place over one university academic year. It is made up of one semester that includes 10 teaching units (TU) and one internship.

- /// TU 1: Statistics and data processing (2 weeks, 50 hours, 3 ECTS)
- /// TU 2: Challenges in the main plant production sectors (2 weeks, 50 hours, 3 ECTS)
- /// TU 3: Plant resistance to pathogens (2 weeks, 50 hours, 3 ECTS)
- /// TU 4: Plant adaptation to abiotic stress (2 weeks, 50 hours, 3 ECTS)
- /// TU 5: Applied plant genomics (2 weeks, 50 hours, 3 ECTS)
- /// TU 6: Genetic resources and management of genetic diversity (2 weeks, 50 hours, 3 ECTS)
- /// TU 7: Objectives and methods in plant breeding (2 weeks, 50 hours, 3 ECTS)
- /// TU 8: Communicating the challenges facing seed and plant sectors (ongoing TU, 3 ECTS)
- /// TU 9: Seed and plant biology, production, technologies and regulations (2 weeks, 50 hours, 3 ECTS)
- /// TU 10\*: Exchange module with a foreign sister university: for example, IAM Zaragoza-SP (3 ECTS)

A six-month internship in a company, a seed or plant sector institute, or a research laboratory. The internship ends with the preparation of a Master thesis which is defended in front of a jury at the end of the course (30 ECTS).

\* Alternative possibility: attending TU 10 (Modelling tools & methods) and TU 11 (Controlled environment for experimentation and phenotyping) of the APIMET agronomy engineering specialisation

## Contact and information:

Additional information and application forms are available through the Montpellier SupAgro website: [www.supagro.fr](http://www.supagro.fr)

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