OBJECTIVES:
- Acquire basic concepts in the multidisciplinary field of Agronomy
- First steps into professionalisation

**First two semesters (S5 and S6): COMMON CORE CURRICULUM**

<table>
<thead>
<tr>
<th>LIFE SCIENCES</th>
<th>ENGINEERING SCIENCES</th>
<th>SOCIAL SCIENCES AND HUMANITIES</th>
</tr>
</thead>
</table>
| - Animal Science and breeding  
- Soils and Plants  
- Food Science  
- Ecology and Environment  
- Fundamental Genetics  
- Mathematics and computer sciences Part 1  
- Mathematics and computer sciences Part 2  
- Process engineering in Agricultural and Food Sciences.  |
| - Economy and Sociology of Agroindustrial contexts. Part I  
- Management Part 1 |

**TRANSVERSAL FIELDS**
- Analysis of Agro-systems followed by 6 weeks training on a farm  
- First steps towards professional insertion  
- Professional ethics  
- Tutored industrial projects (Group work)  
- Modern languages (English plus free choice of a second one)  
- Physical Education
## Second year Engineering program at the ENSAT

### OBJECTIVES:
- Further steps in basic multidisciplinary concepts in agronomy
- Follow up of professional insertion
- First steps into specialization
- Finalize international mobility projects

## Third Semester (S7): COMMON CORE CURRICULUM AND TUTORED INDUSTRIAL PROJECT

<table>
<thead>
<tr>
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<th>SOCIAL SCIENCES AND HUMANITIES</th>
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</thead>
<tbody>
<tr>
<td>- Genetics related to crop and animal improvement</td>
<td>- Applied Mathematics 3</td>
<td>- Management 2 (marketing)</td>
</tr>
<tr>
<td>- Food quality and safety</td>
<td>- Management 2 (data bases)</td>
<td>- Production and Human Ressource Management</td>
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</tbody>
</table>

**Introduction to sustainable development**

- Group project within a private company, a research laboratory, a local, regional authority to stimulate project development
- Modern languages (TOEFL)
- Physical Education

## Fourth semester (S8): PRE-SPECIALIZATION

- 30 Elective courses leading to the following areas of specialization:
  - Agronomy, Animal Sciences, Environment
  - Food Science, Agromanagement, Plant Agrobiosciences
- Cross-disciplinarity in Social and Economic Sciences, Modern languages and Physical Education
- Ten to twelve weeks internship abroad or in France
<table>
<thead>
<tr>
<th>AREAS</th>
<th>Serie 1 February</th>
<th>Serie 2 March</th>
<th>Serie 3 March - April</th>
<th>Serie 4 April - May</th>
<th>Serie 5 May</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agro Management</td>
<td>1.1 Analysis and mapping of socio technical controversies</td>
<td>2.1 Economy of sustainable and territorial development</td>
<td>3.1 Supply Chain and Production Cost Management</td>
<td>4.1 Sociology and methods in social sciences</td>
<td>5.1 Marketing and sale methods</td>
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<tr>
<td>Food Industries</td>
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<td>5.2 Processing of animal products</td>
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<tr>
<td></td>
<td>1.2 Food science (in english upon request)</td>
<td>2.2 Food quality and food safety</td>
<td>3.2 M&amp;E Balances, Food Rheology and Reaction Engineering</td>
<td>4.2 Fermentation and enzymatic processes</td>
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<tr>
<td>Environment</td>
<td>1.3 Biogeochemistry of the environment</td>
<td>2.3 Remote detection and GIS (Environment)</td>
<td>3.3 Water and environment</td>
<td>4.3 Soil and environment</td>
<td>5.3 Biodiversity and landscape management</td>
</tr>
<tr>
<td>Animal Science</td>
<td>1.4 Animal sciences: production and reproduction</td>
<td>2.4 Agronomic approaches to fodder systems</td>
<td>3.4 From plant raw material to food supply</td>
<td>4.4 The animal in its environment</td>
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<tr>
<td>Agro Biosciences</td>
<td>1.5 Plant biotechnology and sustainable agriculture</td>
<td>2.5 Genomics</td>
<td>3.5 Seed industry and plant breeding</td>
<td>4.5 Bio-informatics</td>
<td>5.5 Crop protection</td>
</tr>
<tr>
<td>Agro-ecology</td>
<td>1.6 Cropping systems</td>
<td>2.6 Organic agriculture and composts</td>
<td>3.6 Remote sensing and GIS (Agronomy)</td>
<td>4.6 Direct sowing and conservation agriculture</td>
<td>5.6 Water management in agriculture</td>
</tr>
<tr>
<td>Agronomy</td>
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<td>4.7 Urban agriculture</td>
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