Engineer Agro ParisTech

Description according the grid developed in Kotka Michel Feutrie 28/10/12

Level

• 7

Job family

- Industry: food processing industry, pharmaceutical industry, cosmetics industry, biotechnologies, wood industry, ...;
- Agriculture, forest, environment: vegetal and animal production, aquaculture, forest management, agricultural and forest development, management and environmental protection, national forest office,...;
- Services: administration, expertise, consulting, audit...

Job list

- Production: agricultural engineer, forest production engineer,...
- Research and development: project engineer, researcher, consultant,...
- Management: manager, executive,...

Description of the job

- The Engineer **is able to**:
- Understand and manage the working of production systems in order to produce goods and resources in a sufficient quantity and of good quality (vegetal, animal, and forests resources)
- Understand and integrate the ecological processes in order to ensure the sustainability of systems of production and the production of ecosystem services (benefits gained from ecosystems)
- Understand and integrate the social and economic conditions (or process) of production systems and territories and the indicators of its sustainability
- Integrate the three dimensions of sustainability of production systems and take into account the whole ecosystems services linked to agriculture and forests

Main function

- At the end of the degree course, he/she is <u>able to</u> operate in the sector of Life and Environmental Sciences, (generic skills / transverse skills)
- Analyze and model complex systems,
- - Imagine, design and implement strong, innovative solutions (scientific, technical, social, environmental approach / short-term or long-term projects),
- - **Lead projects** by taking into account the social responsibility in a globalized frame

Occupational standard/Competence

Linked to the ROME

Mandatory or optional

No information

Unit of assessment

- 180 ECTS
- <u>First year</u> (60 ECTS) : it consists of a common-core syllabus, a realization of training period of 4 weeks in small firm dealing with Life Sciences
- <u>Second year</u> (60 ECTS): it consists of a common-core syllabus, specific subjects and optional courses, the leading of a project and of a minimum training period of 2 months in a professional context
- Third year (60 ECTS): it consists of advanced knowledge, of a project and of a training period of 6 months with realization of a report at the end of study. Teachings can take place in one of the department of the institute, in one of the specialities of the Master's degree carried by AgroParisTech or outside of the institute (the other Master's degrees, the schools of ParisTech(Paris Institute of Technology), the other engineering schools, foreign universities).

Learning outcomes

 Not specified in the documents provided by the Agro ParisTech

Method of testing

 Traditional: exams, dissertations and viva on placements in companies or organisations during the 3 years and especially at the end

Continuing Education/Learning

Validation of non formal and informal learning

Job progression

• Linked to individual career