



## Meat and Meat Products (I000653)

Cursusomvang (nominale waarden; effectieve waarden kunnen verschillen per opleiding)

Studiepunten 4.0      Studietijd 120 u      Contacturen 60.0 u

Aanbodssessies en werkvormen in academiejaar 2018-2019

A (semester 1)	Engels	project	5.0 u
		practicum	7.5 u
		excursie	3.75 u
		begeleide zelfstudie	3.75 u
		hoorcollege	37.5 u
		werkcollege: geleide oefeningen	2.5 u

Lesgevers in academiejaar 2018-2019

Devlieghere, Frank	LA23	Verantwoordelijk lesgever
De Smet, Stefaan	LA22	Medelesgever
Eeckhout, Mia	LA23	Medelesgever

Aangeboden in onderstaande opleidingen in 2018-2019

	stptn	aanbodssessie
<a href="#">Bachelor of Science in Food Technology</a>	4	A
<a href="#">Master of Science in Nutrition and Rural Development (afstudeerrichting Tropical Agriculture)</a>	4	A
<a href="#">Master of Science in de biowetenschappen: voedingsindustrie</a>	4	A
<a href="#">Master of Science in Food Technology</a>	4	A
<a href="#">Uitwisselingsprogramma bio-ingenieurswetenschappen: landbouwkunde (niveau master- na- bachelor)</a>	4	A
<a href="#">Uitwisselingsprogramma bio-ingenieurswetenschappen: Food Science and Nutrition (niveau master-na-bachelor)</a>	4	A

Onderwijstalen

Engels

Trefwoorden

Meat technology, meat science, HACCP, meat quality, muscle biochemistry, meat processing

Situering

The aim of this course is to provide basic knowledge in meat characteristics and post-mortem muscle biochemistry and their relation with the quality and processing of meat. Furthermore, the different technologies, ingredients and additives involved in meat processing are discussed. Attention is also given towards the quality assurance and HACCP in the meat industry.

Inhoud

*Theory:*

1. Meat science
  - 1.1. Introduction, definitions and composition
  - 1.2. Meat consumption and nutritional value
  - 1.3. Structure and biochemistry of meat
  - 1.4. Muscle to meat conversion
  - 1.5. Sensorial and technological quality
  - 1.6. Slaughtering and cutting of meat
2. Meat technology: technological processes in the meat industry
  - 2.1. Freezing of meat

- 2.2. Cooking of meat
- 2.3. Drying of meat
- 2.4. Brining of meat
- 2.5. Formed and restructured meat products
- 2.6. Ingredients and additives in meat products, legislation and labelling

*Practical work:*

1. Measuring the quality of fresh meat
2. Quality assurance and HACCP in the meat industry
3. Company visits

**Begincompetenties**

The student has basic knowledge of biology, microbiology and biochemistry.

**Eindcompetenties**

- 1 Have basic knowledge of meat characteristics, muscle biochemistry and meat technological processes.
- 2 Have insight in the post-mortal muscle to meat conversion and the effects thereof on sensory and technological quality.
- 3 Being able to analyse, to assess and to guarantee the quality of meat, including sensory meat quality.
- 4 Understanding how the treatment and the processing techniques in the production of meat products can influence the properties and the quality of the derived products.
- 5 Having insight in the control measures used to guarantee the safety of meat products.
- 6 Being able to identify the consecutive steps in the production of meat products and to build a quality assurance system to guarantee the safety of the produced meat product

**Creditcontractvoorwaarde**

Toelating tot dit opleidingsonderdeel via creditcontract is mogelijk mits gunstige beoordeling van de competenties

**Examencontractvoorwaarde**

Dit opleidingsonderdeel kan niet via examencontract gevolgd worden

**Didactische werkvormen**

Begeleide zelfstudie, excursie, hoorcollege, practicum, project, werkcollege: geleide oefeningen

**Toelichtingen bij de didactische werkvormen**

The theory is dealt with in lectures given by three lecturers. The exercises consist of company visits, laboratory exercises and coached exercises.

**Leermateriaal**

English course notes with literature references are available. All learning material and presentations that are used during the lectures are available via Minerva. Geraamde totaalprijs: 12 EUR

**Referenties**

Meat and meat products. 1995. Ed. A.H. Varnam and J.P. Sutherland. Chapman and Hall. ISBN 0-412-49560-0  
 Technology of meat and meat products. 1992. Ed. J.P. Girard. Ellis Horwood Limited. ISBN 0-13-904285-7  
 Lawrie's Meat Science, 6th edition. 1998. Ed. R.A. Lawrie. Woodhead Publishing Limited. ISBN 1-85573-395-1

**Vakinhoudelijke studiebegeleiding**

For the theory and the theoretical exercises, contact hours are scheduled. During these contact hours the student can ask additional information or explanation to the teacher. The practical exercises are guided by a teaching assistant.

**Evaluatiemomenten**

periodegebonden en niet-periodegebonden evaluatie

**Evaluatievormen bij periodegebonden evaluatie in de eerste examenperiode**

Schriftelijk examen

**Evaluatievormen bij periodegebonden evaluatie in de tweede examenperiode**

Schriftelijk examen

**Evaluatievormen bij niet-periodegebonden evaluatie**

Werkstuk, verslag

Tweede examenkans in geval van niet-periodegebonden evaluatie

Niet van toepassing

Toelichtingen bij de evaluatievormen

**Period-aligned evaluation:**

The written examination consists of several questions that are mostly short open questions. Some questions aim at evaluating the basic knowledge, whereas other questions aim at evaluating insight. One question is also included on the laboratory exercise work.

**Non-period aligned evaluation:**

HACCP task: paper + presentation

company visit: report

Eindscoreberekening

De examiner kan de student die zich onttrekt aan periodegebonden en/of niet-periodegebonden evaluaties voor dit opleidingsonderdeel niet-geslaagd verklaren.  
67% van de punten wordt gerekend voor de theorie (schriftelijk examen)  
33% wordt gerekend voor de evaluatie van de oefeningen (task + report)