van hall larenstein
university of applied sciences

# Food Innovation Management

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| Minor code | VFT3PDVE |
| Education cycle | 1st cycle (bachelor) |
| Mode of delivery | On-campus |
| Study programme | Food Technology |
| Part of study year | Year 3 |
| Location | Velp |
| Semester | Fall semester; terms 1 and 2 |
| Number of credits (ECTS) | 30 |
| Language of instruction | English |
| Target group | Van Hall Larenstein students, Erasmus+ students, external students, preferably with a technological background. |
| Minor co-ordinator and contact person | Joyce Polman, joyce.polman@hvhl.nl |
| Entry requirements and prerequisites | At least two years of a food technology bachelor course, or a lot of experience after consulting the major co-ordinator. |
| Application procedure | Consult Exchange possibilities |

Major study units

| Term of teaching | Study unit code | Name of the study unit | ECTS |
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| Term 1 | VFT3FCVE1 | Food analysis and Consumer behaviour | 7 |
| Term 1 | VFT3PGVE1 | Product group analysis | 7 |
| Term 2 | VFT3PAVE1 | Product Analysis | 7 |
| Term 2 | VFT3PDVE2 | Product Development | 7 |
| Full semester | VFT3ASDVE | Assignment | 2 |

Content

Developments in the food industry come faster and faster. Improvements take place all the time, and also, trends, fashions and consumer's taste are changing all the time. In order to be a success the fierce competition has to be beaten. A good product is not enough, it has to be better than the competition and it has to be recognised as such.

Product development is a team effort in which project management skills are of great importance, and multi-disciplinary is necessary: creativity sessions are organised, consumer behaviour has to be investigated, knowledge of technology, food safety law and processing have to be put into practice. Besides that the development of packaging and how to launch the new product is important. All these aspects might lead to innovation in food products. During this semester you will be busy with a big Product development Project in which you have to manage the whole trajectory of Product development. You will develop a new or improved product in which you have to control all aspects of the developed product. In the end you have to present your product. You will have a lot of supporting lectures.

Competences

- Researching (level 3)
- Experimenting (level3)
- Developing (level 3)
- Supervising/Coordinating (level 2)
- Advising/Purchasing and Sales (level 2)
- Leadership/Management (level 2)
- Self-management (level 2)

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| Learning goals | The student is able to:<br>• Carry out chemical & microbiological calculations in food analysis<br>• Judge microbiological growth in lab scale experiments<br>• Work self-employed and safe in a laboratory<br>• Recognise and demonstrate an understanding of the specific decisions and behaviour of consumers while buying consumer products<br>• Analyse industrial process methods on a food sector<br>• Evaluate and monitor progress in a desk study<br>• Outline the steps taken during a project<br>• Present preliminary results in an individual oral assessment<br>• Evaluate growth and classification of food micro-organisms<br>• Create a table with nutritional values based on chemical experiments<br>• Set up a research proposal and construct a report on the results of the sensory analysis<br>• Set up a research proposal and construct a report on the results of texture analysis and processing<br>• Evaluate cost price and feasibility of own developed product<br>• Recognise and demonstrate an understanding of the impact of culture on business behaviours and practices<br>• Evaluate and apply the product development cycle<br>• Create a new innovative food product |
| Added value | Students will work in groups on all aspects of product development. They researched the Product Group, will have technological and commercial modules and finally have to present their new developed product at the end of the semester |
| Mandatory literature | **Advised books (not mandatory):**<br>Jongen, "W.M.F., Meulenberg, M.T.G Innovation of Food production systems", online available for free<br>• Linnemann, A.R., Boekel, van, A.J.S., "Food Product Design, an integrated approach", first edition. ISBN: 978-90-8686-173-6<br>• Wood, Marian Burk. The marketing plan handbook, ISBN: 9781292021676<br>• Kotler, P., Armstrong, G., Saunders J., Wong, V. (2004). "Principles of Marketing". ISBN 0273711563, 9780273711568 |
| Teaching methods and student workload | **VFT3FCVE1 (7ECTS):**<br>• Chemistry lectures (~30 hours)<br>• Microbiology lectures (~30 hours)<br>• Consumer behaviour lectures (~20 hours)<br>• Chemistry practicals (~40 hours)<br>• Microbiology practicals (~40 hours)<br>• Self-study (~50 hours)<br><br>**VFT3PGVE1 (7 ECTS):**<br>• Group work research product group (~100 hours)<br>• Feedback sessions (~40 hours)<br>• Self-study (~60 hours)<br><br>**VFT3PAVE1 (7ECTS):**<br>• Lectures on Microbiology (~20 hours)<br>• Lectures on Chemistry (~20 hours)<br>• Lectures on Sensory (~10 hours)<br>• Lectures on Physics and Processing (~20 hours)<br>• Practicals Microbiology (~40 hours)<br>• Practicals Chemistry (~40 hours)<br>• Self-study (~50 hours) |

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| | **VFT3PDVE2 (7 ECTS):**<br>• Product development in the sensory kitchen (~100 hours)<br>• Lectures on X-culture (~30 hours)<br>• Feedback on X-culture (~10 hours)<br>• Feedback on product development (~30 hours)<br>• Self-study (~30 hours)<br><br>**VFT3ASVE (2 ECTS):**<br>• Introduction lecture (~2 hours)<br>• Assignments filled in by student in cooperation with teacher (~54 hours) |
| Assessment | **VFT3FCVE1:**<br>• Written exam about food analysis (40%)<br>• Portfolio Practical reports (40%)<br>• Written exam about consumer behaviour (20%)<br><br>**VFT3PGVE1:**<br>• Report on product group (portfolio, 70%, bottom mark 5.5)<br>• Individual assessment on report (oral, 30%, bottom mark 5.5)<br><br>**VFT3PAVE1:**<br>• 60% Microbiology and Chemistry (written, bottom mark 5.5)<br>• 40% Sensory analysis, physics and processing (written, bottom mark 5.5)<br><br>**VFT2PDVE2:**<br>• 90% Report and presentation on developed product (portfolio, bottom mark 5.5)<br>• 10% Report on X-culture (portfolio, bottom mark 5.5)<br><br>**VFT3ASVE:**<br>• Assignment 100% Portfolio (bottom mark 5.5) |
| Evaluation scale | Grades between: 1-10; 0,1 interval; 5,5 pass<br>view ECTS credits and grading |