

Food Health Innovation

Science of Cooking

TO BE REVISED

2019-2020

Term

Autumn semester:

30 augustus- 10 February 2020

Spring semester:

10 February 2020 – 13 July 2020

General information

This minor is open to students in the third year or higher of the bachelor phase of a biomedical or chemistry study. A good background in molecular biology and microbiology is desired. The minor is taught in English and has a study load of 30 ECTS. The courses will be given twice a year, during Autumn and Spring semesters.



Science of Cooking

Although most people regularly cook, they generally do not consider the science behind it. To understand what happens when we cook food, you need to be familiar with the underlying biological, chemical and physical principles.

The science of cooking is by no means new, however, it was only in the last few decades that science has truly been applied to the kitchen. Nowadays, top-chefs work together with scientists, paving the way for new flavors, ingredients, preparations and tasting experiences.

In this program we will explore the “applied science of deliciousness” through the history of cooking, the fundamentals of natural sciences, ingredients, cooking techniques and kitchen equipment, including modernist cooking. This course will not only satisfy the hunger for knowledge, it might also help in cooking: by understanding recipes, to explore beyond the recipes and to be creative with (new) ingredients.

This program consists of theoretical courses of 20 ECTS and a practical of 10 ECTS. During the second period you will apply the theory in our specialized food lab by conducting your own research project.

We wish you an educative and tasteful course!

Courses

The following courses are included in the program:

- History of Cooking (3 EC)
- Fundamental Science of Cooking:
 - I: Microbiology and food safety (3 EC)
 - II: Food Chemistry (3 EC)
 - III: Physics of food and water (3 EC)
 - IV: Physiology and health (3EC)
- Analytical Techniques (3 EC)
- The modernist kitchen (2 EC)
- Science of Cooking research project (10 EC)

University of Applied Sciences
Leiden

Zernikedreef 11
2333 CK Leiden

Postbus 382
2300 AJ Leiden

The Netherlands

Website: hsleiden.nl/english



University of Applied Sciences
Leiden

Zernikedreef 11
2333 CK Leiden

Postbus 382
2300 AJ Leiden

The Netherlands

Website: hsleiden.nl/english

Entry requirements / level

The minor is at undergraduate level, but you will need two years of training in a biological or chemistry study to follow the tuition. Furthermore, basic knowledge of molecular biology and English is required.

Literature

Relevant and recent scientific literature, to be announced later.

Examination

Examination of the courses will be based on assignments, reports and tests.

Science of Cooking research project

During the research project you will apply the theory in our specialized food lab. You will either formulate your own research question, or choose a research question suggested by the lecturers. Students will write a project proposal for a go/no go which includes theoretical background and a detailed plan regarding ingredients, equipment, planning & safety. This plan is also presented in the group for feedback. Subsequently, the students will carry out the research project and write a report about the results. An excursion to a top-restaurant kitchen will be part of the practical.

Application form

Interested? Please fill in the required application form, which can be downloaded from our website: <http://www.hsleiden.nl/english>

Application deadline

15 November 2019 (spring semester)
15 November 2019 (fall semester)

Tuition fees

There are no tuition fees required for students from partner institutions.

Accommodation

Our university does not have its own student accommodation. A local student housing corporation offers temporary, furnished rooms and apartments to international students. You can find more information about accommodation on our website.

Contact

If you have questions about the content and/or the organization of the minor please contact Wouter van Zon, PhD

E-mail: zon.van.w@hsleiden.nl

Phone: +31 63 9113 947

For information about the application procedure and/or accommodation please contact Lisette Oosterhuis

E-mail: international.office@hsleiden.nl

Phone: +31 71 5188 815

