





department of food science and technology













An international Master Program @ BOKU Vienna



WAGENINGENUR



LJUBLJANA



## Content

- What is Safety in the Food Chain (SIFC)?
- Field of Activities
- Partner-Universities
- Structure of SIFC
- Summer Schools
- Students and Application
- Alumnis
- Website

# What is SIFC?

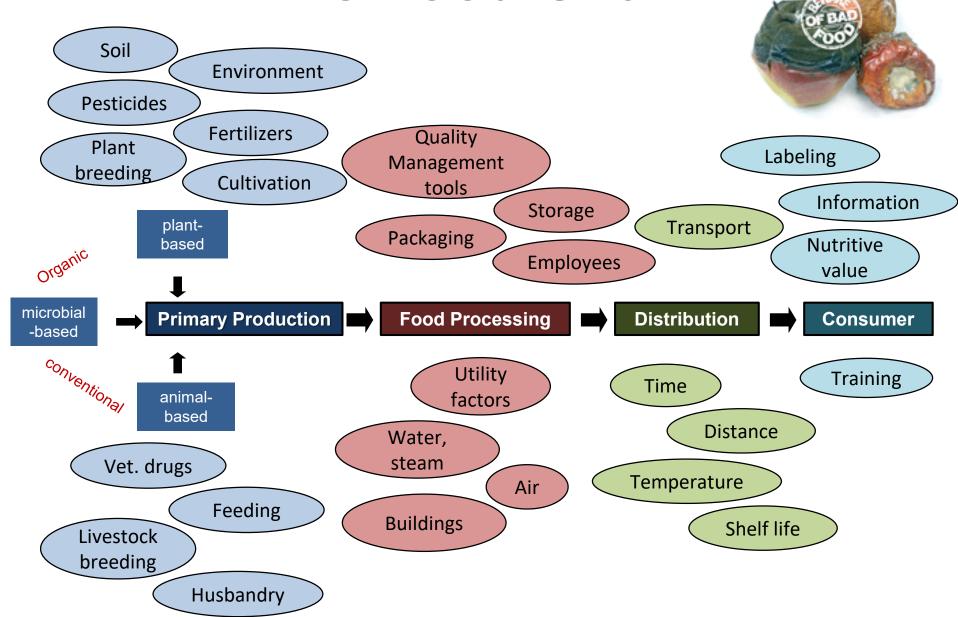
Unsafe food causes many acute and life-long diseases, ranging from diarrhoeal diseases to various forms of cancer. WHO estimates that foodborne and waterborne diarrhoeal diseases alone and taken together kill ~ 2.2 million people annually, 1.9 million of them children....

[WHO, 2012]

# What is SIFC?



# **The Food Chain**



## **Partner-Universities**



**BOKU** - University of Natural Resources and Life Sciences, Vienna



**SCIENCE** - University of Copenhagen, Faculty of Science, Denmark



**WUR** - Wageningen University and Research Centre, the Netherlands



**UHOH** - University of Hohenheim, Germany

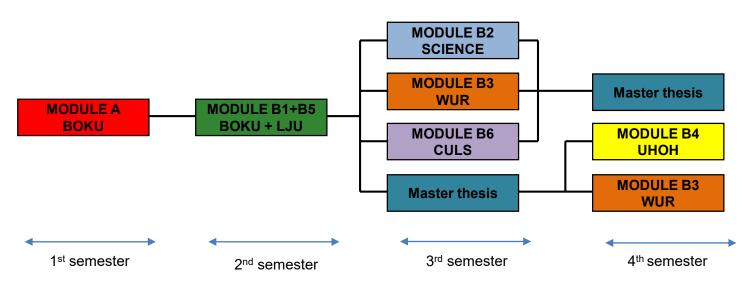


**LJU** - University of Ljubljana, Slovenia



**CULS** - Czech University of Life Sciences Prague, Czech Republic

# Structure of SIFC



Compulsory Courses (Module A)	30 ECTS
Elective Courses in B-Modules	48 ECTS
Free Elective Courses	12 ECTS
Master Thesis (6 months, practical work incl.)	30 ECTS

**Duration: 2 years, 120 ECTS** 

## **Module A**

MODUL B 3 WUR

MODUL B 3 WUR

MODUL B 4

UHOH

Master thesis

MODUL B 3 WUR

MODUL B 4

UHOH

Master thesis

MODUL B2

- Winter semester
- All courses are given at BOKU
- Obligatory courses (30 ECTS)

#### Module A - Basics in food science and food safety

- LE Food Microbiology (4 ECTS)
- PR Food Microbiology for SIFC (3 ECTS)
- LE Food Chemistry for SIFC (4 ECTS)
- PR Food Chemistry for SIFC (3 ECTS)
- LE Human Nutrition (3 ECTS)
- LS Food Safety and Risk Management (3 ECTS)
- PR Food Technology Practical course (5 ECTS)
- PR Applied Quality Management for SIFC (5 ECTS)

## Module B1/B5

MODUL B3 WUR

MODUL B3 WUR

MODUL B4

UHOH

Master thesis

MODUL B4

WODUL B3 WUR

MODUL B4

WODUL B3 WUR

- In summer semester
- All courses at BOKU
- 10 courses, 3 ECTS each
- All courses are blocked
- 5 Blocks:

#### Module B1/5 - Advanced Courses in the field of:

- 1. Food Chemistry and Hygiene (min 6 ECTS)
- 2. Food Processing (min 3 ECTS)
- 3. Special Food Safety Issues (min 3 ECTS)
- 4. Food Traceability and Advanced Food Microbiology (min 3 ECTS)
- 5. Seminars (min 3 ECTS)

## 1 Food Chemistry, Hygiene – 6 ECTS

Туре	code	Title	ECTS
LE	754.309	Food Authenticity (Mayer)	3
PR	754.310	Food Authenticity (Mayer)	3
LX	940.304	VU Molecular biology for food analysis (Peterbauer)	3
LX	754.320	Reference Materials and Methods Validation in Food Safety Assurance (Poms)	3
LX	811.357	Biology, Chemistry and Microbiology for Civil Engineering (Fürhacker)	3
LE	754.323	Validation of Cleaning Processes and Hygienic Design (Mauermann)	3
LX	970.301	Analysis of Bio-Hazards in Food (Krska)	3

# 2 Food Processing – 3 ECTS

Type	LV- Nr.	Title	ECTS
LX	752.325	Food Packaging (Bergmair)	3
LE	951.300	Plant Production (Kaul)	3

## 3 Special Food Safety Issues – 3 ECTS

Туре	LV- Nr.	Title	ECTS
LE	933.303	European regulatory framework for organic production (Axman)	3
LS	754.202	Novel Food and Health Claim Regulations in the EU (Salminen)	3
LE	791.313	Safety Aspects of Plant Biotechnology (Laimer)	3
LE	751.312	Food Safety in Livestock Feeding (Gierus)	3
LX	754.335	Automatic Identification Technology in Food Industry (Bruck)	3

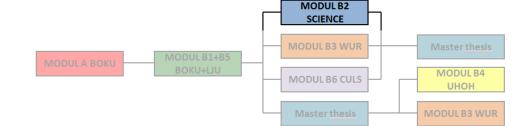
## 4 Seminars – 3 ECTS

Туре	LV- Nr.	Title	ECTS
SE	752.317	Human Safety in Food Processing (Novalin)	3
SE	754.315	Specific and Emerging Topics in Food Microbiology (Domig)	3
SE	754.326	National and International Food Safety Authorities and Agencies (Hofstädter)	3



(carried out at BOKU)

Type	LV- Nr.	Title	ECTS
LX	754.333	2017: Molecular Epidemiology of Food-Borne Pathogens (Smole)	3
LX	754.334	2018: Biomarkers in Food Characterisation (Raspor)	3
LX	771.319	2016: Determination of provenance and authenticity of food and food products by modern analytical methods (Hann)	3



- In winter semester
- All lectures at SCIENCE, Denmark
- 4 courses, 7.5 ECTS each
- Example courses



#### **Module B2 - SCIENCE**

- Hygiene and Sanitation
- Processing
- Control of Food Borne Microorganisms
- Int. Food Law and Safety Management
- Chemical Food Safety
- Risk Analysis in Food Safety

SCIENCE

MODUL B3 WUR

MODUL B1+B5
BOKU+LJU

MODUL B6 CULS

MODUL B4
UHOH

Master thesis

MODUL B3 WUR

MODUL B4
UHOH

- In winter and summer semester
- All lectures at WUR, The Netherlands
- 5 courses, 6 ECTS each
- Example courses:



#### Module B3 - WUR

#### **SEPT - JAN**

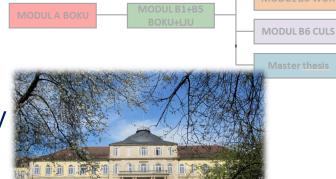
- 1. Food Quality Management
- 2. Food Related Allergies and Intolerances
- 3. Advanced Food Microbiology
- 4. Food Quality Analysis
- 5. Food Law

#### **FEB - JULY**

- 1. Food Safety Management
- 2. Food Toxicology
- 3. Food Safety Risk Assessment
- 4. Food Safety Economics
- 5. Advanced Biochemical Analysis of Foods
- 6. Food Hazards
- 7. Risk Communication



- In summer semester
- All lectures at UHOH, Germany
- 5 courses, 6 ECTS each
- Example courses:



SCIENCE

**MODUL B4** 

#### **Module B4 – UHOH**

https://www.uni-hohenheim.de/study-programmes?&L=1#jfmulticontent\_c256678-2

- 1. Nutrient Gene Interaction
- 2. Global Nutrition
- 3. Oxidative Stress and Disease: Bio-functionality of Antioxidants
- 4. Food Borne Microorganisms and Human Health
- 5. Prevention of Metabolic Syndrome by Nutrition
- Authenticity Control and Chemical Methods for the Determination of Food Quality (valuable ingredients and undesired contaminants)
- 7. Safety in Agriculture and Organic Farming

MODUL B3 WUR

MODUL B3 WUR

MODUL B4

UHOH

Master thesis

MODUL B3 WUR

MODUL B4

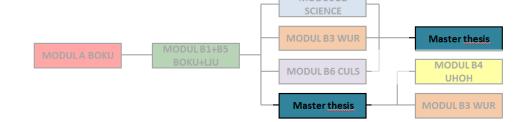
WODUL B3 WUR

- In winter semester
- All lectures at CULS, CZ
- Example courses:

#### Module B6 - CULS

- Agricultural Water Management (6 ECTS)
- Soil Conservation and Protection (6 ECTS)
- Diseases of Crops of Temperate Climate (5 ECTS)
- Aquaculture (5 ECTS)
- Experimental Design and Statistics (5 ECTS)
- Poultry Management (5 ECTS)
- Milk and Dairy Products Quality and Processing (6 ECTS)
- Environment Pollution and Remediation (6 ECTS)
- Management of Reproduction in Livestock (6 ECTS)

## **Master thesis**



- in winter- or summer semester of the 2<sup>nd</sup> year
- Possible at all SIFC-Partner Universities
- Main supervisor from BOKU
- Practical work + written thesis
- Duration: 6 months

#### Possible topics

- Food Chemistry/Microbiology
- Food Quality Assurance /Management
- Food Legislation
- International Food Safety Management

• ...

# **Students**





Doktor der Bodenkultur

Food Science and Technology

Safety in the Food Chain



Biotechnology

**Bachelor Food and Biotechnology** 

Individual evaluation of graduates of other Bachelor degrees: they must have fundamental knowledge in the fields of

- Chemistry,
- Biology/biochemistry/microbiology/genetics,
- Process technology,
- Mathematics/statistics/physics,
- Management & law and
- Food technology

learning outcomes are defined in the curriculum

- LBT Bachelor degree from BOKU or similar degree of another university (max 30 ECTS can be made up in parallel)
- English requirements

Adequate English proficiency: Level B2/C1

- BOKU language course (at least level English III)
- Cambridge Certificate of Advanced English
- IELTS Academic results 6.0 or better
- Completion of a study programme that was entirely taught in English from countries with English as the official language
- TOEFL (paper based 577; computer based 233; internet based 90 91)
   TOEFL Home Edition will not be accepted
- TOEIC (at least 785 points)
- Successfully passed school-leaving examination in English from a recognized domestic or foreign
  educational institution, provided that the country of issue's educational regulations offer level B2. If the
  school leaving certificate does not confirm level B2 of the European frame of reference, a confirmation from
  the appropriate ministry must be submitted.

### **Contact:**

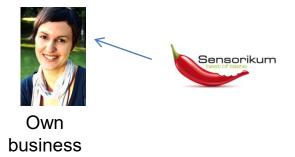
- studienservices@boku.ac.at
- https://boku.ac.at/en/studienservices/themen/zulassung

## Field of Activities

- Food safety management
- Product development
- Food research
- Food legislation

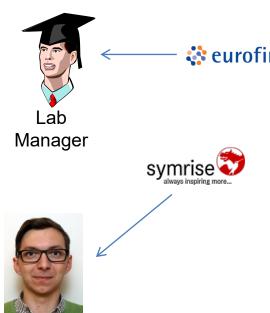
# Possible employers

- Food industry
- Food trade
- Research institutions
- Public institutions
- National and international Organisations









Own

business







Trainee



Internship





Food Safety Assessment

## www.safetyinthefoodchain.com





About SIFC

Master programme

Universities

Admission

People

FAQ

News and Events

Info material

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## Welcome to the International Master Programme "SAFETY IN THE FOOD CHAIN"



C Fotolla.com

The international Master programm "Safety in the Food Chain" (SIFC) was developed to provide a profound academic MSc programme concerning all areas of food safety. It offers a high level study course by combining all the existing expertise of European universities. The contents of the curriculum are focused on the whole spectrum of the food chain (regarding supply and production).

This study programme especially targets students who hold a BSc degree in "Food Science and Biotechnology". Based on their fundamental knowledge in the fields of food science, natural and engineering science, students will gain special knowledge as well as practical skills in the area of food safety, risk identification, risk assessment, and risk communication. Food and feed related issues will be combined in a complementary way.

The MSc SIFC was developed by 5 partner universities of the Euroleague for Life Sciences ELLS and the University of Ljubljana.

Information meeting when: Tuesday, 20.01.2015 at 4pm where: seminar room 2/84 (2nd floor, Muthgasse II)

#### **News**

no news in this list.







department of food science and technology

# SAFETY IN THE FCOD CHAIN

# Thank you for your attention! Questions?

**CONTACTS**: <a href="mailto:studienservices@boku.ac.at">studienservices@boku.ac.at</a>

https://boku.ac.at/en/studienservices/themen/zulassung

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