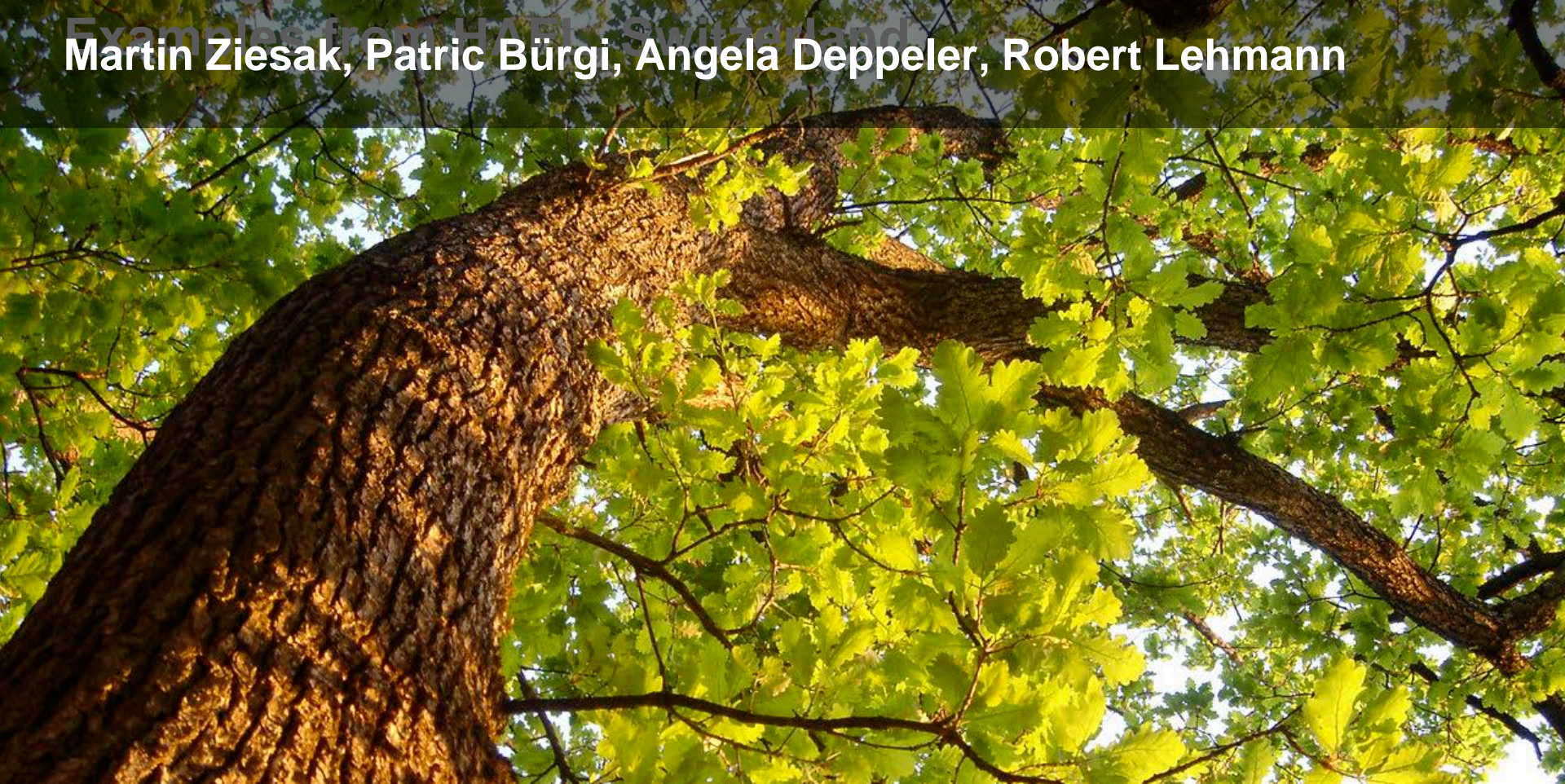


Berner Fachhochschule  
Hochschule für Agrar-, Forst- und Lebensmittelwissenschaften

# Certificate education programs - A new approach to include universities in the life-long- learning process

Examples from HVL Switzerland  
Martin Ziesak, Patric Bürgi, Angela Deppeler, Robert Lehmann





# Agenda

- I. About HAFL
- II. The Life-long learning process at HAFL
- III. CAS Forest management



# I. About HAFL



# HAFL, Zollikofen near Berne

(School of Agricultural, Forest and Food Sciences  
Bern University of Applied Sciences)

- Founded in 1967
- 190 Employees (thereof 55 professors)
- 60 Visiting lecturers
- 510 Students
- 3 BSc courses and 1 MSc course [containing several mayors]



Quelle: <http://www.lfi.ch/resultate/regionen.php>



**Agriculture**



**Forest sciences**

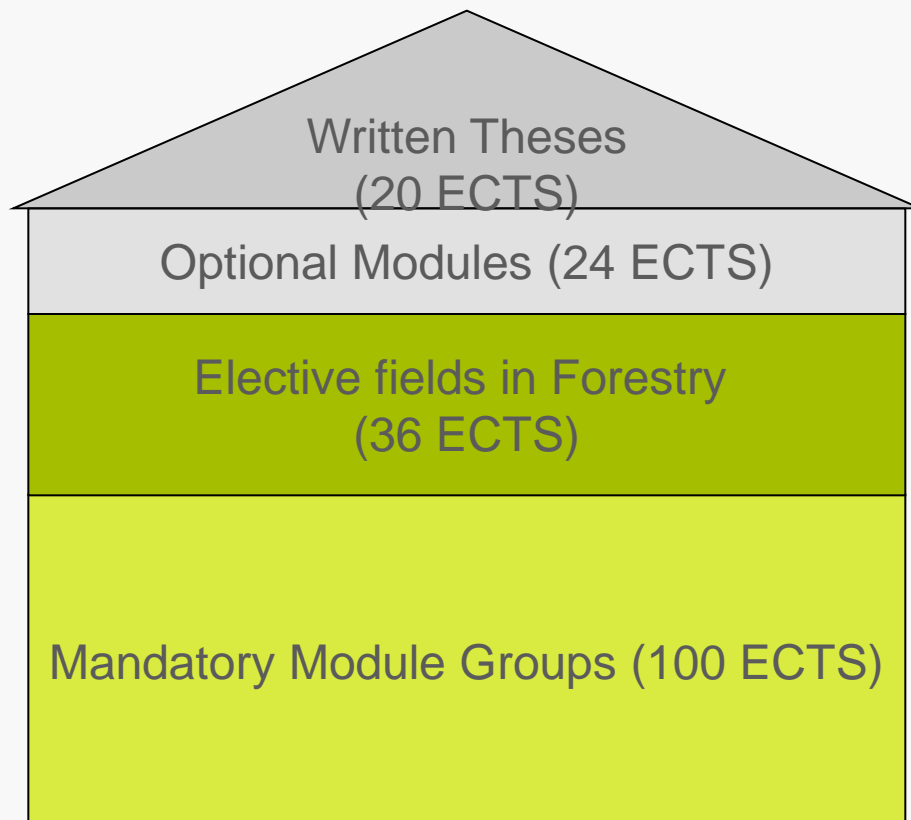


**Food Science &  
Management**



## Structure of BSc. programme

**Bachelor = min. 180 ECTS** (1 ECTS  $\approx$  30 working hours)



### **Elective fields in Forestry:**

- Forest and Society
- Wood and Timber Industry
- Mountain Forests and Natural Hazards

### **Mandatory Module Groups:**

#### ***General Basics***

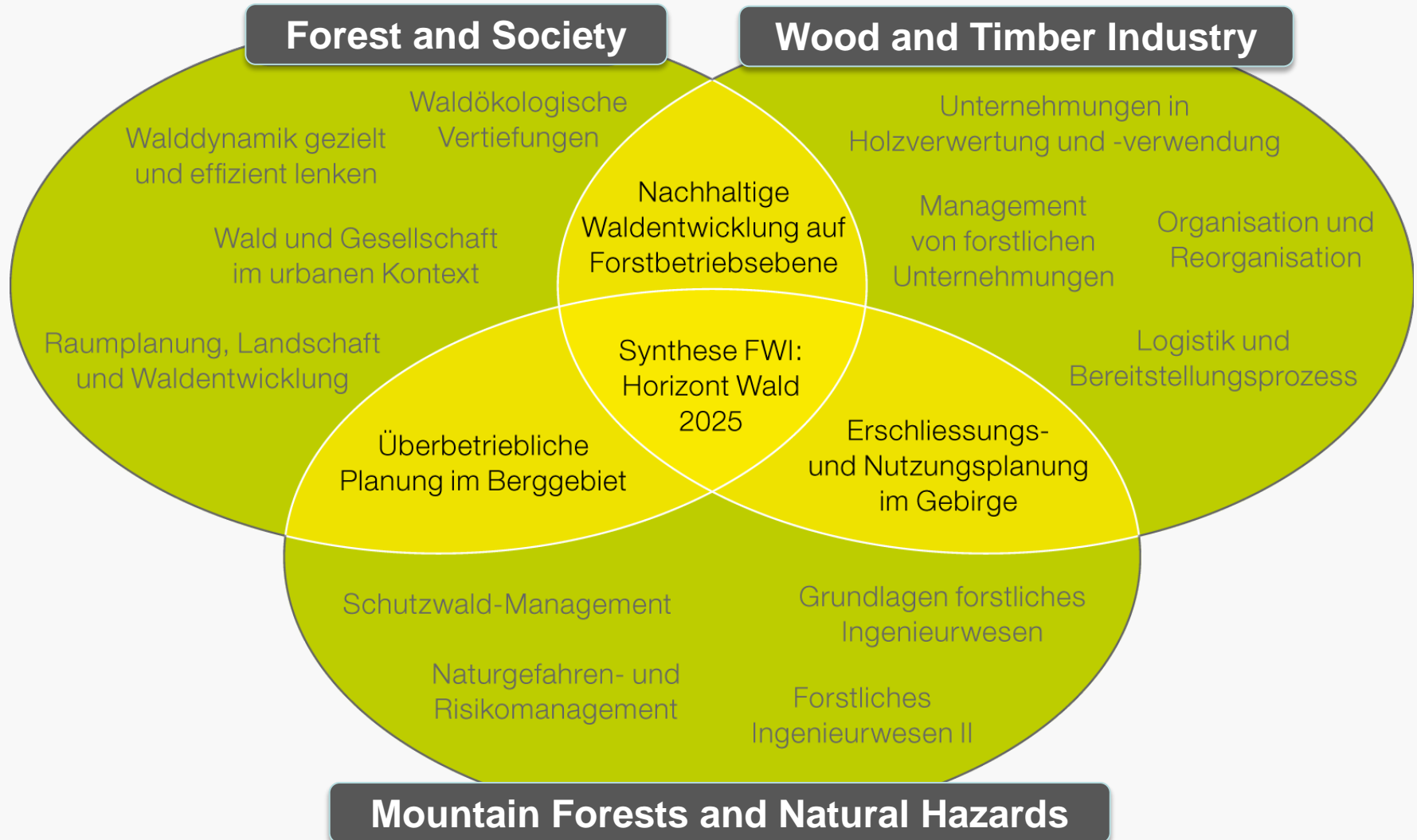
- Natural Science and Languages
- Mathematics, Economics and IT

#### ***Forestry Basics***

- Ecosystem Forest, Mountain Forests and Natural Hazards
- Fundamentals in Silvicultural Production
- Silvicultural Planning and Wood Fundamentals



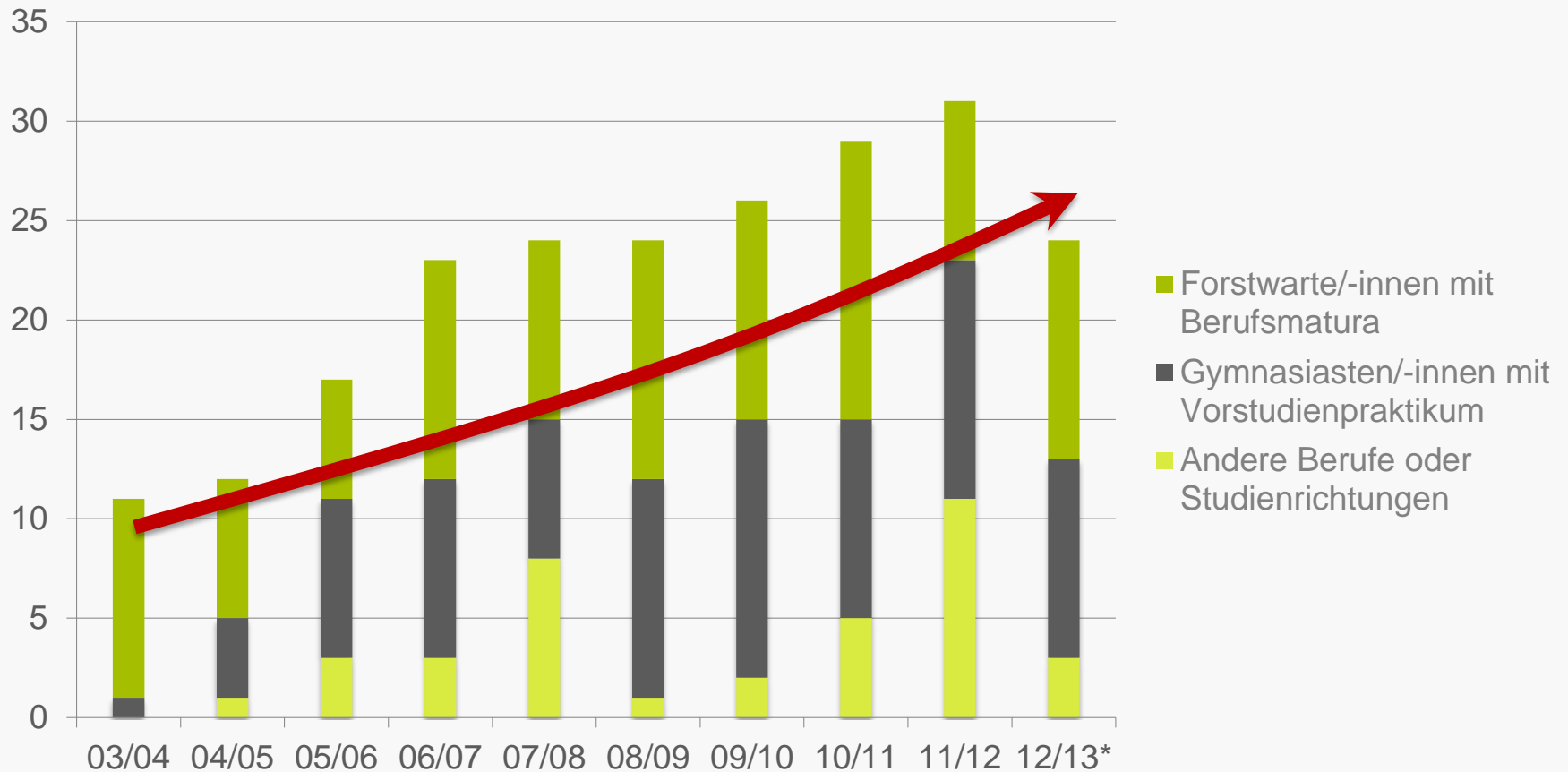
# Elective Fields in BSc. Forestry





# Number of Students

## Annual enrolment figures in BSc. Forestry



\* Preliminary figures

# MSc. in Life Sciences

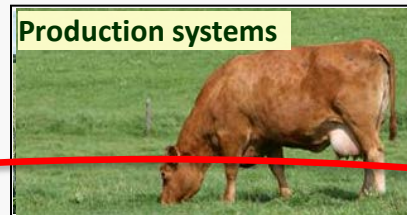
## Applied Agricultural and Forestry Sciences

### Four Majors

1. **Wertschöpfungsketten und ländliche Entwicklung** (wirtschaftlicher Ansatz)



2. Nachhaltige **Produktionssysteme** (Produktionstechnik)



3. **Internationale Waldwirtschaft** (grenzüberschreitender Ansatz)



4. **Regionalmanagement in Gebirgsräumen** (alpiner Ansatz)



### Quatre majors

1. **Filières économiques et développement rural** (approche économique)

2. **Systèmes de production durable** (techniques de production)

3. **Gestion forestière internationale** (approche transfrontalière)

4. **Management régional en zone de montagne** (approche alpine)

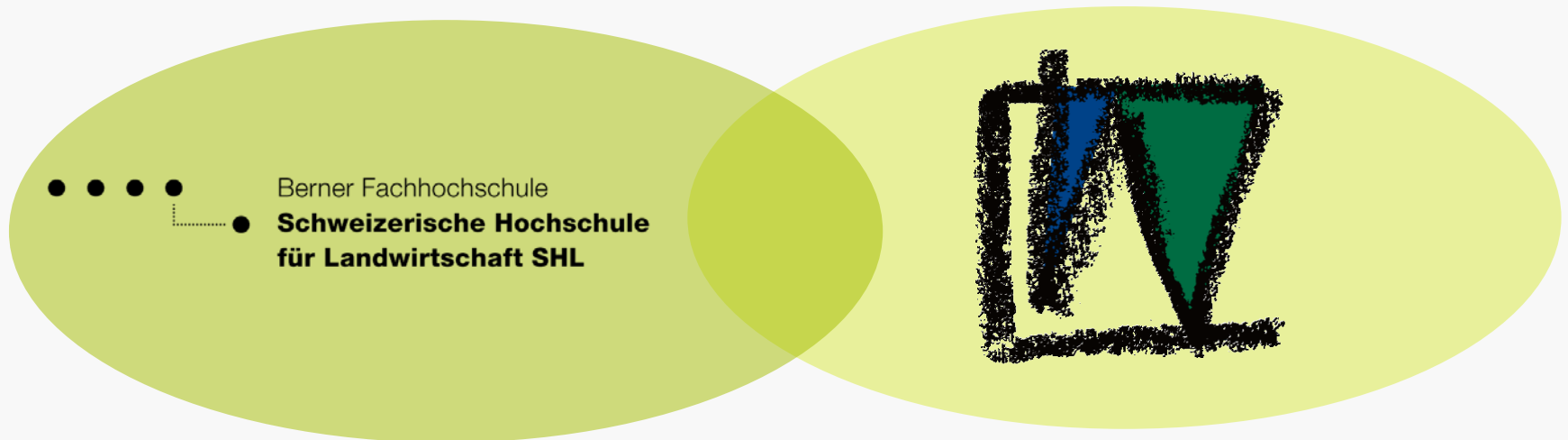




# MSc in International Forest Management

HAFL, Zollikofen, Switzerland

Faculty of Forestry, University of Applied Sciences Weihenstephan, Germany



The following skills are taught in the cooperation master:

- Forest enterprise further education
- Personell management
- National and international markets
- Languages
- International Forestry
- Management of value-added chains
- Project management
- Cross Cultural Management



## Common modules

### Entrepreneurial Basics:

- Innovation and knowledge management
- Leadership
- Business management
- Communication and market
- Society and politics

3 of 5

## *Modules en commun*

### Life Sciences advanced:

- Applied statistics
- Data management and visualization
- Life Cycle Assessment
- Management of R&D projects
- Quality excellence
- Modeling of complex systems
- Sustainable development in NRM
- Biodiversity
- Nutrition and chronic diseases
- Sustainable sourcing/processing of food
- Cellular and molecular physiology
- Active natural substances and materials
- Material science
- Polymers and applications

6 of 14

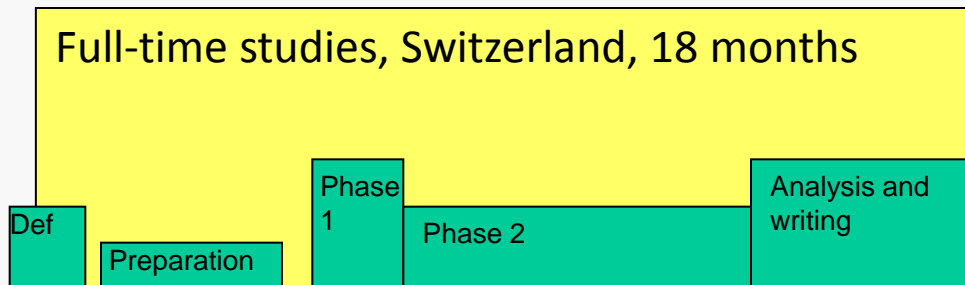


# Modules of Specialisation for each Major

Value Chains and Rural Development	Sustainable A&F Production Systems	Development in Mountain Areas	International Management of Forest Industries
Logistics, Supply Chain and Network Management	Expansion of Personal Scientific Knowledge	Land- und forstwirtschaftliche Produktion in Bergregionen	Logistics, Supply Chain and Network Management
Consumer Behaviour, Markets and Trade	Holistic Assessment of Production Systems	Naturgefahren und Risikomanagement	Consumer Behaviour, Markets and Trade
Quality Management, Traceability, and Corporate Responsibility	Optimisation of Production Systems in Agriculture & Forestry	Management of Spatial Data - GIS	International Management in Forestry
Policies and Institutions - Drivers for Development and Innovation	Advances in Agricultural Sciences	Leadership and Human Resources Management	International Forestry
Rural and Regional Development in Practice	Current Topics in Applied Agricultural Research	Projekt: Naturgefahren Forst- und Landwirtschaft	
Doing Applied Natural and Social Sciences Research			
Knowledge Management and Transfer in Agriculture & Forestry			
Integrated Resources Management and Climate Change			

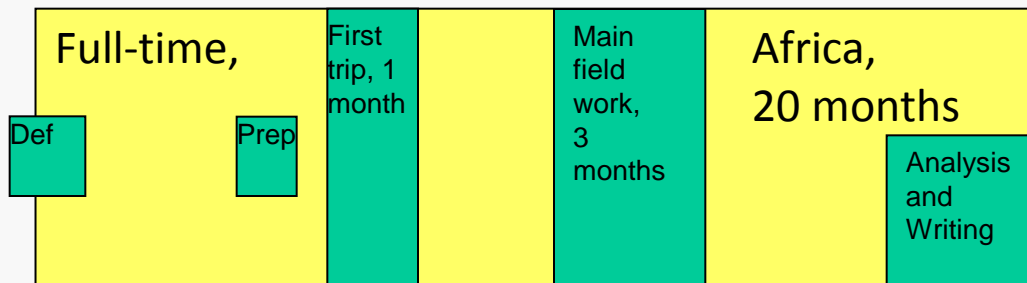
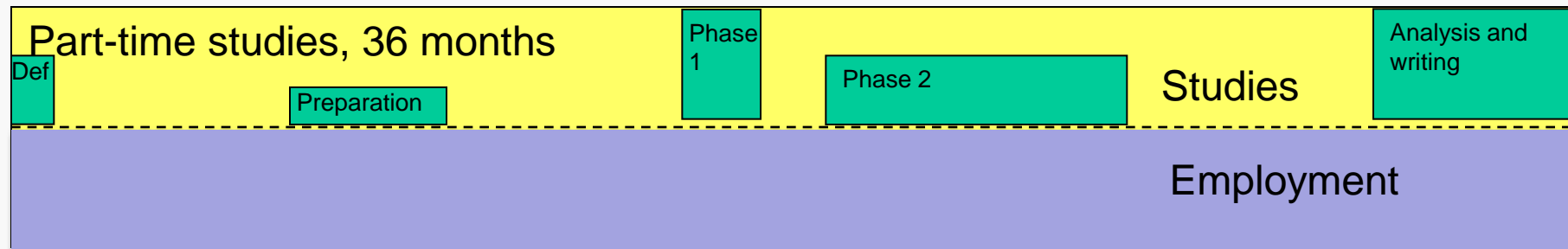


# Individual study agreements



**Course work**  
(all modules are offered annually)

**Thesis work**





## II. The Life-long learning process at HAFL





# Bologna and life-long learning?

- In the Bologna Process every second year, ministers responsible for higher education in the 46 Bologna countries meet to measure progress and set priorities for action.
- The last meeting was held in Bucharest, April 2012. The released Bucharest communiqué builds on the Leuven communiqué from 2009.
- This communiqué sets 10 priorities for the period 2010 to 2020. One aspect out of these ten is “lifelong learning”.



# Swiss options for post graduate study programs

	Minimum number of required ECTS credits
• CAS ( <i>Certificate of Advanced Studies</i> ),	10
• DAS ( <i>Diploma of Advanced Studies</i> ),	30
• MAS ( <i>Master of Advanced Studies</i> ) respectively	60
• EMBA ( <i>Executive Master of Advanced Studies in Business Administration</i> ).	

They all do not belong to any particular consecutive standard BSc. or MSc. , they are ment for (later) specialisation.



# HAFL CAS programmes

- **Equigarde® Plus**

*Topic: horses*

- **Soil mapping**

- **Regional development**

- **Coaching for actors in rural areas**

- **Forest management**

Agriculture



# CAS: Coaching for actors in rural areas



Module	Content	Duration
Module 1	Potential workshop: Introduction to the basis of coaching, customer needs, training situations	2 days
Module 2	Concept of course of action related to coaching, objectives, agreements and strategic planning	3 days
Module 3	Analysis, diagnosis, learning and organizational context	3 days
Module 4	Problem-solving, decision and conflict work as well as emotions in coaching	3 days
Module 5	Learning coaching Every participant works as a coach with a customer	2 days
Module 6	Future, vision and resources work in coaching	3 days
Module 7	Evaluation and conclusion in coaching processes, project presentations	3 days
<b>Plus individual coaching, peer group, project, etc.</b>		<b>Total 360 lessons</b>

# CAS: Coaching for actors in rural areas

## Target audience

People with a professional activity in a rural area, who are working with people facing complex situations.

## Admission

- People who possess a higher degree (University, FIT, University of Applied Sciences) or a comparable training course and practical experience
- At least three years of professional experience
- Practical coaching application possibilities during the training time.





# III. CAS Forest management





# Organisation

## **CAS course:**

- 320 hours work load
  - **13 mandatory modules** (156 h work load),
  - **5 elective modules** (60 h work load),
  - **2 major excursions** (harvesting in mountain areas; management )
  - **thesis** (90 h work load)
- Every module has a separate final exam
- **lessons** are at the end of the week
  - Friday 7 hours,
  - Saturday 7 hours
- **Duration: 14 months** (11 teaching months, 3 months for thesis).

## **Number of participants:**

- **10 – 20 participants**



## Moduls

Modulgruppen				
Produktion	Normatives und QS	Unternehmensführung	Forstökonomie/-politik	Organisation und Reorganisation
Neue Holzerteverfahren und ihr Einsatz	Recht für Waldunternehmen	Strategieentwicklung für Waldunternehmen	Wald- und Holzwirtschaftspolitik mit internationaler Ausrichtung	Organisationsanalyse
Logistik in der Wald- und Holzwirtschaft	Steuer- und Versicherungswesen in Waldunternehmen	Jahresplanung	Strukturen und Ansprüche der Holzabnehmer	Organisations- und Kooperationsformen in der Wald- und Holzwirtschaft
Holzernteplanung und -durchführung	Qualitätssicherung in Waldunternehmen	Kosten- und Leistungsmanagement in Waldunternehmen	Ökonomische Grundlagen	Change Management
Technologien zur Unterstützung von Produktionsprozessen		Management und Führung	Forstmanagement in einer Waldunternehmung – konkret vor Ort studiert und diskutiert	Kommunikationsmanagement in forstlichen Organisationen
Einsatz von Geo-Informationssystemen		Finanzierung und Investition	Nachhaltigkeit in der Wald- und Holzwirtschaft	
Managementtools für die waldbauliche Planung		Aufbau und Nutzung eines Management Informationssystems (MIS)		
Wegemanagement		Marketing und Vermarktung forstlicher Produkte und Dienstleistungen		



**Green mandatory, grey elective**



# Costs

8 500.- CHF (~ 7 000.- €)

This fee includes :

- attendance of courses
- documents
- overnight fees
- meals

## *Organisations- und Finanzierungsmöglichkeiten (Vorschlag)*

- Arbeitgeber stellt Kursteilnehmer an **Wochentagen frei**. Samstag wird von Kursteilnehmer aufgebracht.
- Kostenbeteiligung-/übernahme:
  - ganz oder teilweise durch Arbeitgeber
  - ganz oder teilweise durch kantonale Weiterbildungsfonds
  - ganz oder teilweise durch Teilnehmer
  - Kombination der genannten Varianten.



## CAS Forest management class 2009 – 2011

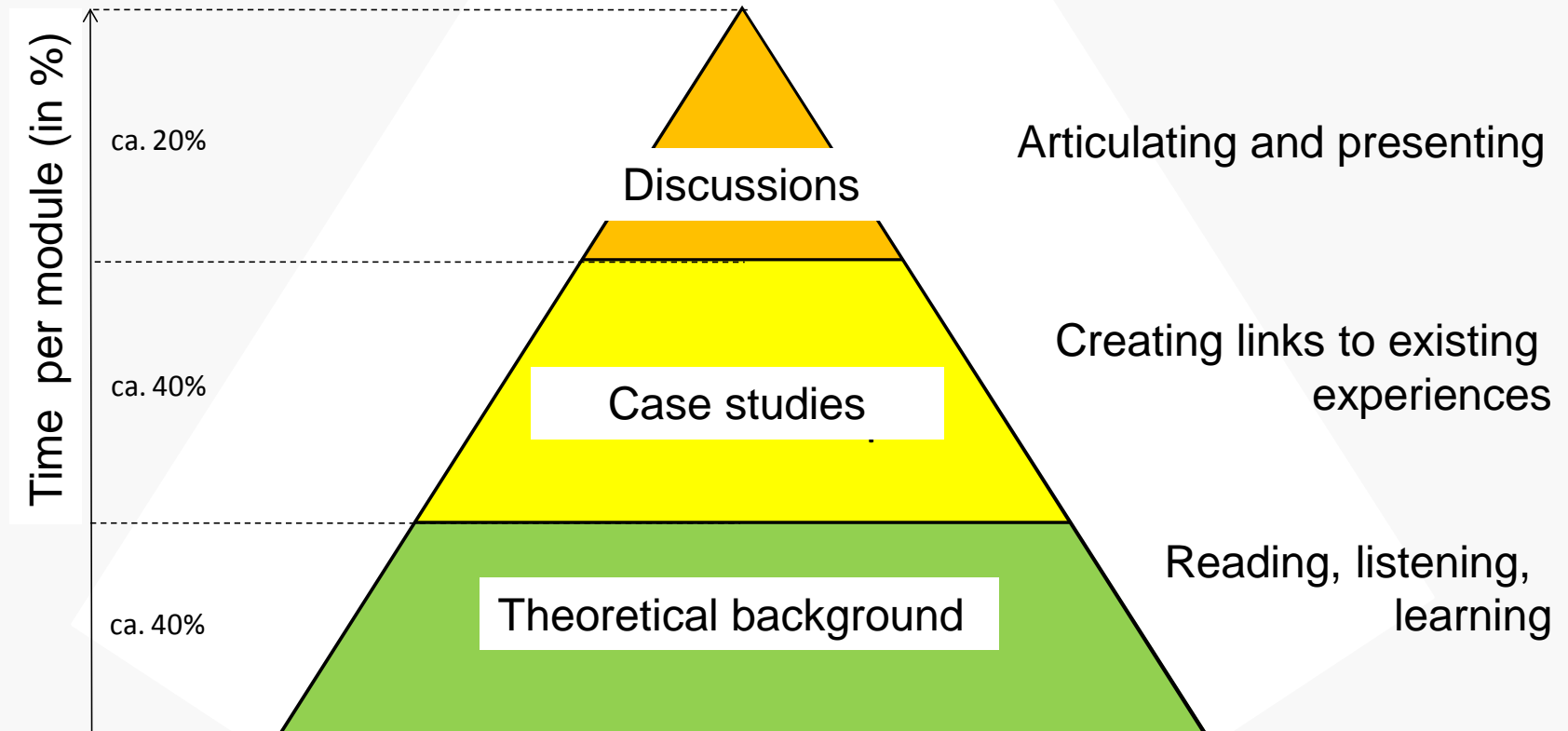
So far : the program was conducted 4 times with a total of 59 participants (46 German, 13 French).





# Didactical approach

This requires different **learning strategies**







# Didactical approach

Additionally:

- Clear schedule regulations ( 7 lessons per day;  
6 hours for preparational & subsequent work)
- Prepared learning materials (reading list, hand outs)
- Clear regulation for exams
- Always a final students' evaluation



Since 2012 economical expert WVS

**Name:** Mélanie Oriet

**Ausbildung:** Dipl. Forsting. ETHZ

**Berufliche Funktion:** Kreisforstingenieurin Kanton Jura

„In dieser Weiterbildung kann ich meine Kenntnisse in Management und Unternehmensführung auffrischen und vertiefen. Sie gibt einen **guten Überblick über die aktuellen Herausforderungen von Waldunternehmungen und bietet** viele **Werkzeuge für den Alltag**. Mein Highlight: Der Besuch bei einem **privaten Waldbesitzer in Baden-Württemberg** – ein konkretes und interessantes Beispiel moderner Unternehmensführung. Die Qualität der Module, die eher theoretischer Natur sind, hängt von der – in der Regel guten – Qualität der Referenten ab.“

*Mélanie Oriet*



since 2013 CEO State forest enterprise Berne

**Name:** Michael Gloor

**Ausbildung:** Dipl. Förster HF

**Berufliche Funktion:** Stv. Leiter Staatsforstbetrieb Bern (SFB)

„Die Erwartungen und Anforderungen, welche 20 Kursteilnehmer (alles erfahrene Betriebsleiter) an die meist aus der Praxis stammenden Referenten stellen, sind sehr hoch und vielfältig. Grossmehrheitlich wurden meine persönlichen Erwartungen bisher erfüllt. **Neben neu vermitteltem Wissen aus dem Unterricht sind auch die vielen angeregten Fachdiskussionen mit den anderen Kursteilnehmern sehr wertvoll.** Mein persönliches Highlight war der Besuch beim Forstbetrieb Fürst zu Fürstenberg, welcher eindrücklich gezeigt hat, dass in der Forstwirtschaft noch einiges möglich ist.“

*Michael Gloor*

# Summary



- The Bologna process does include the idea of life-long learning
- Universities can play an active, part in this process
- CAS courses are an option how this can be offered in an attractive manner



# Questions and discussion

