

Practice meets science

International advanced training course on “Snow and Avalanches”
17 – 21 February 2025 in Davos

Approximate program

The course begins on Monday at 8:15 h

Monday, 17 February 2025

Avalanches in Switzerland and history of SLF

Snow physics

Avalanche formation

Coffee break

Exercise: Avalanche formation and snowpack interpretation

Lunch break

Principles of regional avalanche forecasting

Forecasting tools

Coffee break

Exercise: Assessment of avalanche danger

Ice breaker

Tuesday, 18 February 2025

Snow profile observation and stability tests

Field day: Snow profile observation and stability tests

Lunch in the field

Snow profile and stability evaluation

Presentation of results and evaluation by each group

Snow profile interpretation

Science event at SLF

Wednesday, 19 February 2025

Avalanche history Davos

Avalanche dynamics

Avalanche hazard mapping

Coffee break

Solving avalanche challenges in practice

Lunch break

Wet- and glide-snow avalanches

Separate programs for module 1 and 2

Module 1	Module 2
Snow mechanics	Temporary protection measures
Snowpack stability: Layering and variability	Artificial avalanches release
Coffee break	
Measuring snow properties (PST, SMP)	Avalanche detection
Principles of snow cover models	
Assessment of avalanche hazard in the backcountry	Exercise: Road closure, yes or no?
	Case study

Thursday, 20 February 2025

Separate programs for module 1 and 2

Module 1	Module 2
Field day: New methods for field measurements	Permanent protection measures
	Coffee break in the Hotel
	Exercise protection measures
	Experience of a local avalanche service
	Field day: Avalanche mitigation
Coffee break in the Hotel	Visit Jakobshorn patrollers and Davos Frauenkirch
Snow profile and stability evaluation, discussion and reflection of the field day	
Application of snow cover models	
Social event: Visit to local brewery and dinner in Monstein	

Friday, 21 February 2025

Separate programs for module 1 and 2

Module 1	Module 2
Snow stability evaluation and interpretation of measurements from previous field day	RAMMS: Rapid mass movement simulations
Recent developments and future challenges in avalanche forecasting	Practical use of avalanche modeling
	Recent model developments – Application in practice
Coffee break	
Synthesis of course: Final discussion	Synthesis of course: Final discussion
Answers to open questions	
Key points of synthesis	
Lunch buffet	
RAMMS workshop (optional)	