

MAS in Sleep Medicine – Study Plan



2023-01-31 The MAS in Sleep Medicine Course is a university study program leading to the award of the title "Master of Advanced Studies in Sleep Medicine, University of Bern, Università della Svizzera italiana (MAS SM Unibe USI)", as laid out in the Regulations governing the MAS in Sleep Medicine.

1. Course objectives

About Sleep medicine is a rapidly growing field as more and more people suffer from sleep problems and related disorders. In order to meet the increasing demand for specialists in this field, this course offers local and international students, researchers and professionals operating or planning to operate in the field of Sleep, Consciousness and Related Disorders the opportunity to complement their core competences with a formal deepening and broadening of their knowledge and skills.

Competence objectives The course competences are acquired in a MAS course with several modules. At the end graduates will:

1. know the structural and functional basis of sleep regulation, related disorders and consciousness regulation,
2. know the fundamentals of sleep medicine,
3. gain deep theoretical and practical expertise in the diagnosis and therapy of sleep disorders and in selected areas of sleep medicine,
4. general practical and theoretical knowledge of sleep scoring.
5. as part of a practice-oriented diploma thesis they demonstrate their capability of acquiring scientific literature and transferring knowledge into practice in form of at least one publishable text,
6. according to their professional background they are capable of managing a unit for sleep medicine and to assume executive functions.

2. Duration, outcomes and objectives of the modules

Duration and scope The duration of the course is 2.5 years and consists of online modules, Summer School hybrid, Winter School hybrid, internship, MAS-thesis) and equals 60 ECTS-Credits (ca. 1500 study hours).

The details of the course are described in the annex of this study plan.

Assessments

3. Performance assessment

The performance assessment includes the following elements:

- a. Course attendance to the required extent,
- b. Performance assessment from all modules according to Art. 16 in the “Regulations governing the MAS Program in Sleep Medicine”. The details of the assessments are described in the annex of this study plan.

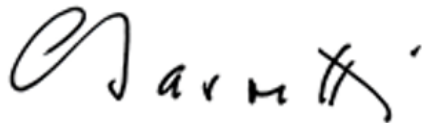
4. Final regulations

Entry into force

The present plan shall enter into force on 2023-04-01.

2023-01-31

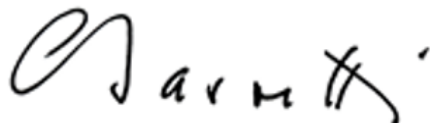
Released by the program management:



Prof. Dr. med. Claudio Bassetti

2023-03-15

Adopted by the Faculty of Medicine, University of Bern
The Dean



Prof. Dr. med. Claudio Bassetti

Annex – Study Plan of the MAS in Sleep Medicine

Module 1

Basic Sleep Medicine

ECTS	4 ECTS credit points (incl. self-study and test)	Duration	Approx. 100 hrs.
Assessment	Multiple choice test	Req. attendance	100%
Learning outcomes	Graduates will <ul style="list-style-type: none"> • learn the basics about Sleep Medicine • be able to analyse and explain the definition of sleep and sleep regulations • be able to assess sleep, vigilance and circadian rhythms 		
Learning objectives	<ul style="list-style-type: none"> • Sleep-wake cycle, consciousness and their disorders • Circadian rhythms • International classification of sleep disorders • Strategies in sleep research • Sleep regulations • Sleep and digitisation 		
Learning and teaching methods	<ul style="list-style-type: none"> • Online platform with approx. 10 online lectures & papers • Self-study, reading, preparation • Online live meeting Q&A, case discussion and deepening of knowledge 		
Prerequisites	None		
Teaching language	English		

Module 2

Sleep Medicine Summer School

ECTS	3 ECTS credit points (incl. self-study and test)	Duration	Approx. 75 hrs.
Assessment	Multiple choice test Essay	Req. attendance	80%
Learning outcomes	<ul style="list-style-type: none"> • This module is organised in cooperation with the European Sleep Foundation. The detailed program is presented on the website www.europeansleepfoundation.ch. 		
Learning objectives	<ul style="list-style-type: none"> • Details on www.europeansleepfoundation.ch 		
Learning and teaching methods	<ul style="list-style-type: none"> • 1 week Seminar in Switzerland or another country in Europe (hybrid for students that are not able to travel) • Q&A sessions and case discussion • Seminar discussions 		
Prerequisites	None		
Teaching language	English		

Interdisciplinary Approach

ECTS	4 ECTS credit points (incl. self-study and test)	Duration	Approx. 100 hrs.
Assessment	Multiple choice test	Req. attendance	100%
Learning outcomes	Graduates will <ul style="list-style-type: none"> gain more in-depth knowledge about Sleep Medicine understand the link between sleep and gender medicine, sport, aging, covid, nursery 		
Learning objectives	<ul style="list-style-type: none"> Circadian, sleep and health Sleep and sport Sleep and gender medicine Sleep and aging and lifespan Sleep and covid Sleep and nursery Sleep and consciousness 		
Learning and teaching methods	<ul style="list-style-type: none"> Online platform with approx. 10 online lectures & papers Self study, reading, preparation Online live meeting Q&A and case discussion Interaction with peers on Ilias: make a post related to this module and comment on at least 1 peer-contribution 		
Prerequisites	None		
Teaching language	English		

Sleep Medicine Winter School

3 ECTS-Credits, several lectures (hybrid), 1 multiple choice test

ECTS	3 ECTS credit points (incl. self-study and test)	Duration	Approx. 75 hrs.
Assessment	Multiple choice test Essay	Req. attendance	80%
Learning outcomes	<ul style="list-style-type: none"> This module is organised in cooperation with the European Sleep Foundation. The detailed program is presented on the website www.europeansleepfoundation.ch. 		
Learning objectives	<ul style="list-style-type: none"> Details on www.europeansleepfoundation.ch 		
Learning and teaching methods	<ul style="list-style-type: none"> 1 week Seminar in Switzerland or another country in Europe (hybrid for students that are not able to travel) Q&A sessions and case discussion Seminar discussions 		
Prerequisites	None		
Teaching language	English		

Basic Science

ECTS	5 ECTS credit points (incl. self-study and test)	Duration	Approx. 125 hrs.
Assessment	Multiple choice test Presentation	Req. attendance	100%
Learning outcomes	Graduates will <ul style="list-style-type: none"> Gain advanced insights with a focus on clinical topics 		
Learning objectives	<ul style="list-style-type: none"> Network neurophysiology, physiology-pathology Sleep wake cycle, circadian clocks Neurobiology of the consciousness system Epilepsy and chronobiology Animal model of narcolepsy, animal model of RBD 		
Learning and teaching methods	<ul style="list-style-type: none"> Online platform with approx. 15 online lectures & papers Self study, reading, preparation Online live meeting Q&A and case discussion Webinar with students presenting a prepared work & discussion 		
Prerequisites	None		
Teaching language	English		

Primary Sleep Disorders

ECTS	6 ECTS credit points (incl. self-study and test)	Duration	Approx. 150 hrs.
Assessment	<ul style="list-style-type: none"> Multiple choice test 	Req. attendance	100%
Learning outcomes	Graduates will <ul style="list-style-type: none"> gain advanced insights with a focus on clinical topics 		
Learning objectives	<ul style="list-style-type: none"> Insomnia, Hypersomnia, Parasomnia Pediatric disorders Sleep-related movement disorders RLS/PLMS clinical aspects and treatment Sleep apnea Physiology and phenomenology of dreaming Disorders of consciousness 		
Learning and teaching methods	<ul style="list-style-type: none"> Online platform with approx. 17 online lectures & papers Self study, reading, preparation Online live meeting Q&A and case discussion 		
Prerequisites	None		
Teaching language	English		

Objective Sleep Measures

ECTS	4 ECTS credit points (incl. self-study and test)	Duration	Approx. 100 hrs.
Assessment	<ul style="list-style-type: none"> • Multiple choice test • Presentation 	Req. attendance	100%
Learning outcomes	Graduates will <ul style="list-style-type: none"> • gain in-depth theoretical and practical insights into sleep scoring 		
Learning objectives	<ul style="list-style-type: none"> • Imaging during sleep (fMRI, PET, NIRS) • Electrical activity during sleep (EEG, HD-EEG, MEG, LFP, Unit recordings) • Objective measurements of sleep in the sleep laboratory • Introduction to sleep scoring • Introduction of RemLogic and sleep scoring 		
Learning and teaching methods	<ul style="list-style-type: none"> • Online platform with approx. 8 online lectures • Self study, reading, preparation • Online live meeting Q&A and case presentation 		
Prerequisites	None		
Teaching language	English		

Specialization

ECTS	9 ECTS credit points (incl. self-study, test and presentation)	Duration	Approx. 180 hrs.
Assessment	Multiple choice test Presentation	Req. attendance	100%
Learning outcomes	Graduates will <ul style="list-style-type: none"> • work on their specialization and choose 3 of below topics 		
Learning objectives	<ul style="list-style-type: none"> • Topic 1: Disorders of consciousness • Topic 2: Sleep and pulmonology • Topic 3: Sleep and psychiatry • Topic 4: Sleep and pediatrics • Topic 5: Sleep and neurology • Topic 6: Sleep and epilepsy • Topic 7: Insomnia • Topic 8: Consumer Sleep Technology (CST) • Topic 9: Narcolepsy • Topic 10: Anaesthesia and sleep neuroscience • Topic 11: Artificial Intelligence: Sleep/Epilepsy/Consciousness 		
Learning and teaching methods	<ul style="list-style-type: none"> • Online platform with online lectures & papers • Self study, reading, preparation, Presentation • Online live meeting Q&A and case presentation 		
Prerequisites	None		
Teaching language	English		

Internship Sleep Laboratory

ECTS	4 ECTS credit points (internship and report)	Duration	Approx. 100 hrs. 2-4 weeks
Assessment	Report	Req. attendance	100%
Learning outcomes	Graduates will <ul style="list-style-type: none"> gain practical insights in a sleep lab at one of our Partner Universities 		
Learning objectives	Practical project where the students define the goal together with a mentor of the Partner University / Sleep Lab		
Learning and teaching methods	<ul style="list-style-type: none"> Working at a sleep lab Writing a report 		
Prerequisites	None		
Teaching language	English		

MAS-Thesis

ECTS	15 ECTS credit points	Duration	Approx. 375-450 hrs.
Assessment	MAS-thesis		
Learning outcomes	Graduates will <ul style="list-style-type: none"> • be dedicated to research and to write a MAS-thesis • 12'000 – 20'000 words 		
Learning objectives	<ul style="list-style-type: none"> • A pool of topics and mentors will be provided to the students • Every student is free to choose a topic and a specialist in the field of sleep medicine (subject to approval by the MAS program lead) 		
Learning and teaching methods	<ul style="list-style-type: none"> • Research and writing a thesis • Self study and research 		
Prerequisites	None		
Teaching language	English		

Transferable Skills

ECTS	3 ECTS credit points	Duration	Approx. 75 hrs.
Assessment	Multiple choice test	Req. attendance	100%
Learning outcomes	<ul style="list-style-type: none"> • Graduates will Gain knowledge in management and leadership 		
Learning objectives	<ul style="list-style-type: none"> • Healthcare leadership training 		
Learning and teaching methods	<ul style="list-style-type: none"> • Online platform • Online lectures & papers 		
Prerequisites	None		
Teaching language	English		