



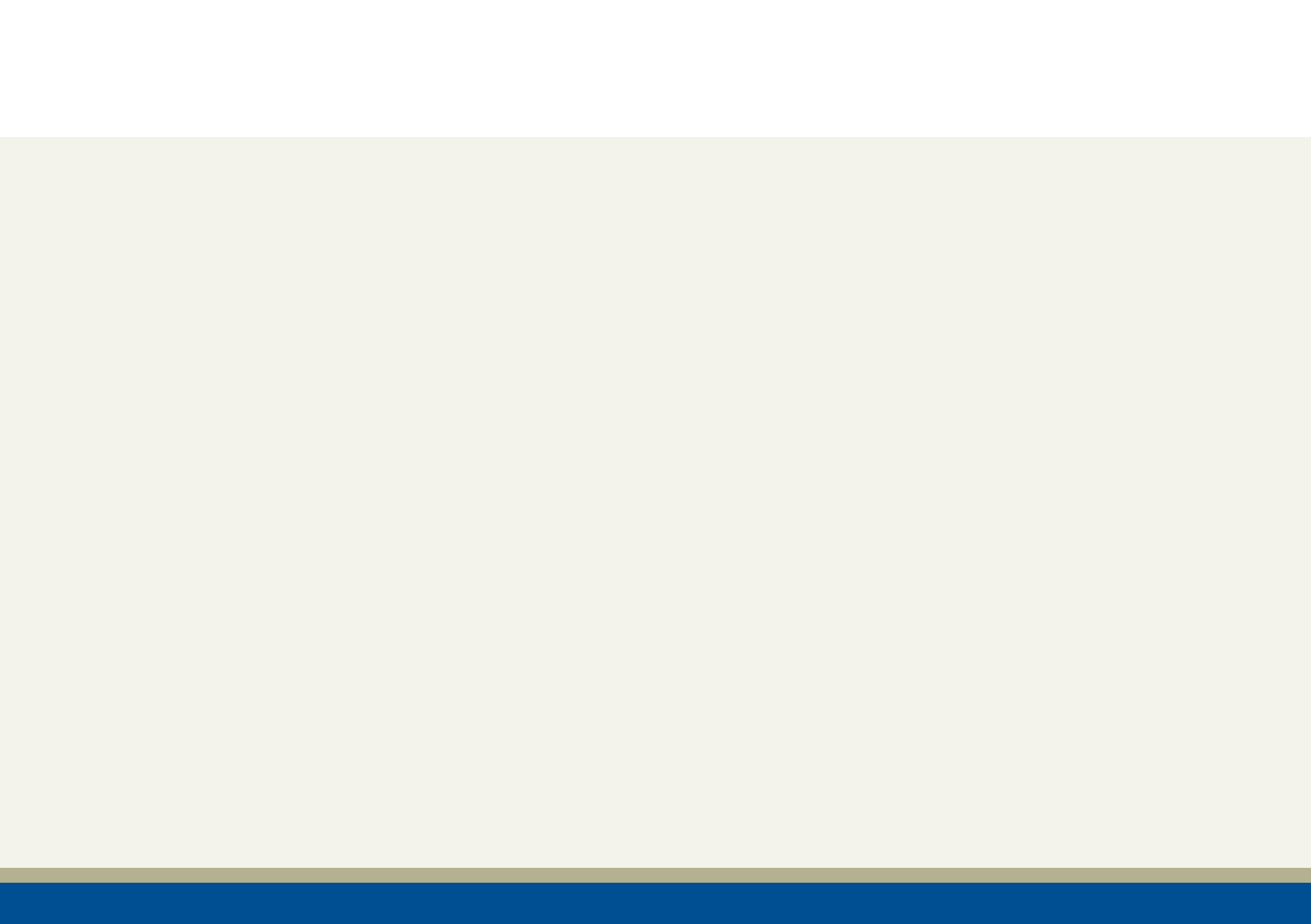
ulm university universität  
**uulm**

**For Scientists  
and Physicians**



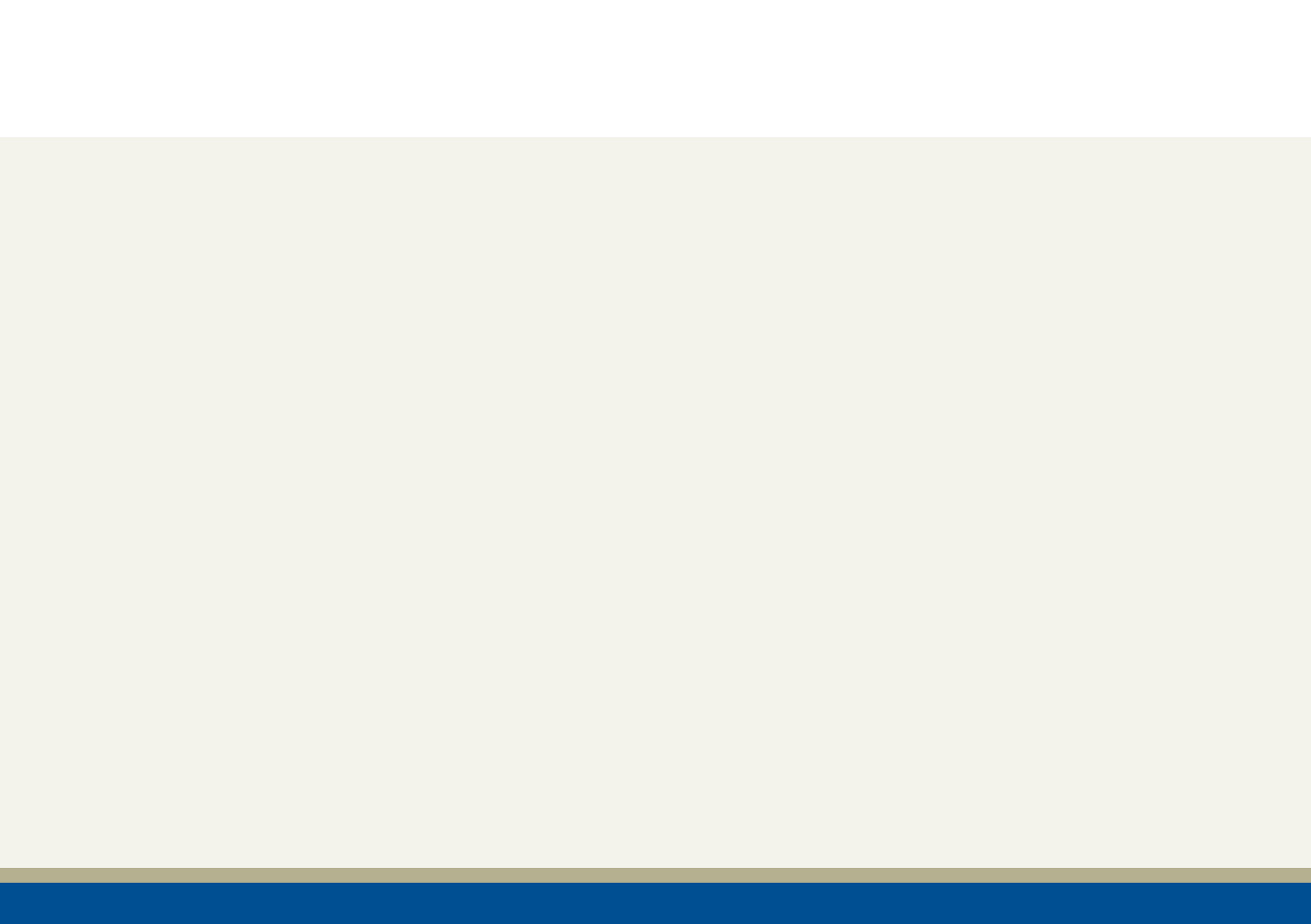
## **Master Online Advanced Oncology**

Unique curriculum preparing for leadership tasks in oncology  
Study part-time – team-up internationally!



# Content

Preface	3
What We Offer	4
What You Gain	5
Attendance Seminars	6
Online Phases	7
Module Guide	8
Module 2: Interdisciplinary Oncology	9
Module 3: Clinical Research	10
Module 4: Advanced Therapies & Integrated Concepts	11
Module 5: Management	12
Exams and Pre-exam Assignments / Master Thesis	13
Application and Admission	14
Students' Statements	16
Cooperating Partners	18
Scientific Conference Center Reisenburg Castle	19
Board of Directors	20
Imprint	21



## Preface

There is a growing global demand for academic continuing education of oncologists and scientists comprising – besides extensive clinical skills in various fields of oncology – aspects of patient management, standardization of treatment procedures as well as expertise in the performance of clinical trials and cooperation with international companies. Ulm University has established a unique study program addressing these needs.



**Prof. Dr. Thomas Wirth**  
**Dean of the Medical Faculty,**  
**Ulm University**

The Master Online Study Program Advanced Oncology adds to the international visibility of our faculty and it helps to create an international network of experts around the world.

**Prof. Dr. Hartmut Döhner**  
**Vice-President for Medicine, Ulm University**  
**Spokesman Executive Board,**  
**Comprehensive Cancer Center Ulm**

The Comprehensive Cancer Center in Ulm is one out of eleven Centers of Excellence in oncology in Germany. This Master Online Program is an important pillar in its educational program.



## What We Offer

### ■ International 2-year-part-time Master degree

The Master Online Study Program Advanced Oncology is taught in English and brings together colleagues from all over the world.

### ■ Unique combination of multidisciplinary contents

The curriculum includes interdisciplinary oncology, clinical research and advanced therapies of site-specific cancers and operative practice in health management.

### ■ Intensive supervision and support-concept

We are providing individual support to integrate the study workload into your daily working life. For this purpose, individual contact persons will be at your disposal to answer administrative, organizational, technical and lecture-related questions.

### ■ Self-paced distance learning and blended-learning concept

The modulated time schedule allows a timely and locally flexible learning. Traditional e-learning concepts are combined with online learning events and face-to-face seminars in order to support problem-based and collaborative learning.

### ■ High scientific and clinical quality

Renowned international experts and organizations grant a high quality e-learning program.

### ■ Additional certificates

Participants will receive credit points of continuing medical education by the State Chamber of Physicians (LÄK in Germany) and the European Accreditation Council for Continuing Medical Education (EACCME) which are recognized by the American Medical Association (AMA) towards the Physicians Recognition Award (PRA).

### ■ Education in an exclusive learning atmosphere

Online and attendance seminars in small groups in a close discourse with the experts is our understanding of modern, learner-oriented postgraduate education. Reisenburg Castle, the venue for our attendance seminars, provides the perfect retreat for a close get-together of scholars and lecturers.

### ■ Additional skill acquisition

Professional presentation workshop and communication training.

## What You Gain

Successful completion of the program

- Leads to the academic degree of Master of Science (MSc)
- Qualifies for leading positions in hospitals, cancer centers, the pharmaceutical industry and academic or health care companies
- Provides the opportunity to become part of an international network of professionals and leaders in the field of oncology



The program is tailored for graduates in human medicine (practicing oncologists) or natural sciences (scientists of the pharmaceutical industry, research institutions) with professional experience in oncology (for details on eligibility requirements see page 14).

## Attendance Seminars

### Face-to-Face Seminars

Participation in the five attendance seminars is a mandatory prerequisite for successful completion of the study program. While the first seminar includes formal enrollment, the other four seminars include the module exams which also require personal appearance.

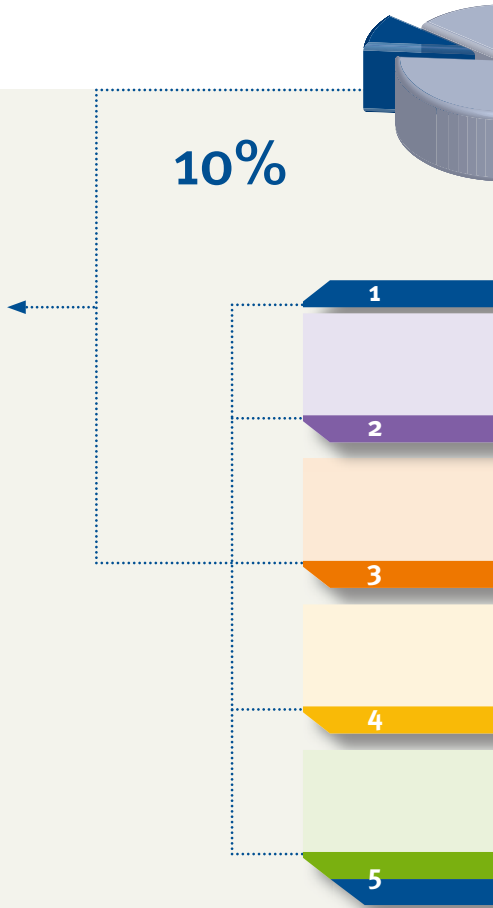
Four out of five attendance seminars will be held at the Science Conference Center »Schloss Reisingburg« of Ulm University. The picturesque castle dating back to the 17<sup>th</sup> Century provides high-quality accommodation and conference facilities. The 4<sup>th</sup> seminar is being held under the auspices of our cooperation partner, the European School of Oncology (ESO) in Ermatingen, Switzerland, and is incorporated in the ESO-ESMO Masterclass.

Besides scientific workshops, live-lectures and soft skill training, the attendance seminars provide the platform for creating an international cooperation and networks to improve cancer care worldwide.

### Contents

- Scientific seminars and workshops
- Exchange among students
- Building up contacts and networks
- Visit of cooperation partners
- Communication and presentation workshops
- Exams
- Module evaluation

10%



1

2

3

4

5



90%

## Online Phases

### e-Learning Platform

The four online modules are divided into separate courses. Approximately 150 experts in the field of oncology and management share their knowledge in about 130 learning units. The e-learning approach offers timely and locally flexible learning, since lectures may be viewed any time at convenience simply by entering the learning platform. This allows self-paced studying in order to combine work, family and advanced training. The structure of each unit is consistent and provides everything the student needs to learn the unit contents successfully. Tools to communicate with the lecturers complete the didactical concept of our learning philosophy.

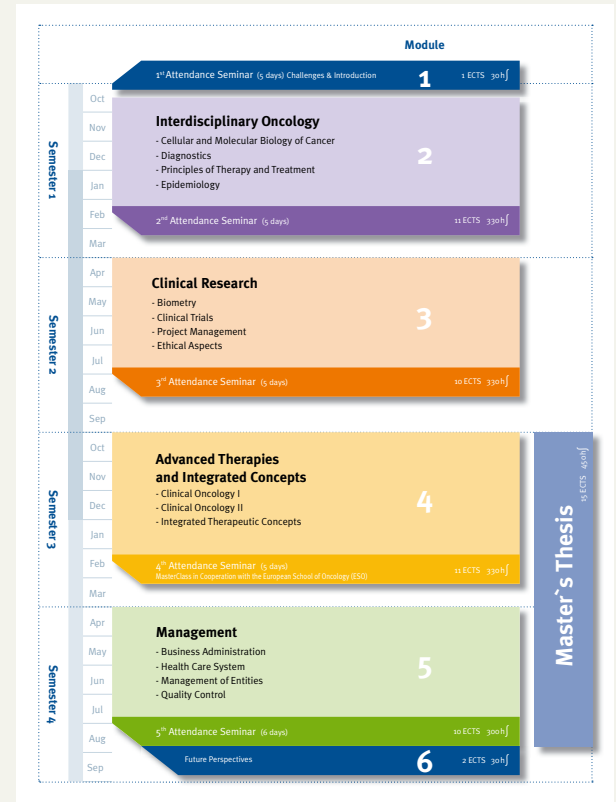
### Contents

- High quality video lectures
  - enriched with interactive elements
  - continuously evaluated and updated
- Review articles summarize the most important facts
- Additional papers, research reports and links for in-depth study
- Self-assessment tests
- Communication tools
- Lecture evaluation



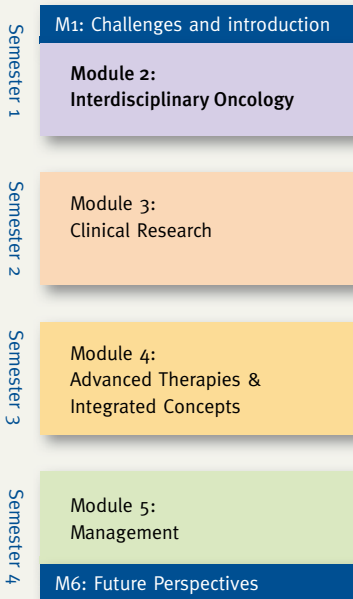
## Module Guide

The modular composition of the postgraduate study program is pursuing a networked competency development in diagnosis and treatment, in the performance of clinical trials as well as in leadership tasks in cancer centers. Integrated attendance seminars allow the exchange with renowned international experts. Furthermore, joint activities with international professional societies, organizations and experts support the quality of this endeavor. In this sense, contractual cooperation has been entered, with the European School of Oncology (ESO), Italy.



# Module 2: Interdisciplinary Oncology

The curriculum of Module 2 is divided into four courses:



Course 2.1 **Cellular and molecular biology of cancer** is focusing on recent key aspects of translational research. The units vary from gene structure to cancer stem cells representing the broad spectrum of knowledge in cancerogenesis.

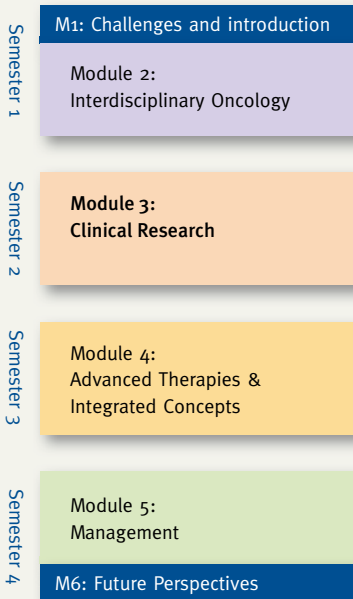
Course 2.2 **Diagnostics** is summarizing all modern tools used for work-up of a cancer patient. Benefits and limitations of imaging techniques up to molecular diagnostics are being discussed by means of case-based scenarios.

Course 2.3 **Principles of Therapy** is highlighting treatment options in oncology ranging from surgery to targeted therapy. Interdisciplinary cooperation among the different competencies is being elaborated.

Course 2.4 **Epidemiology** is giving an overview on cancer statistics and cancer etiology. Epidemiologic methods are being discussed and will establish a direct connection to the subsequent semester focusing on **Clinical Research**.

## Module 3: Clinical Research

The curriculum of Module 3 is divided into four courses:



Course 3.1 **Biometry** focuses on key aspects of biostatistics and their application to the field of oncology. The units comprise study types, statistical tests, survival analysis, and sample size estimation for clinical trials in oncology.

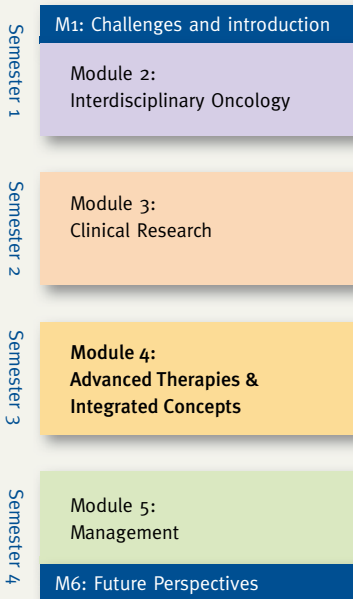
Course 3.2 The **Clinical trials** course delivers the toolbox for setting up, running and publishing a clinical trial. Aspects like quality assurance and transfer of study results into clinical practice are being discussed by examples from the CCCU-based clinical trials center.

Course 3.3 The **Ethical Aspects** course deals with ethical principles for informed consent, biobanking, study participation, collaboration between stakeholders with a different background (academic/industry). Equally important is the unit on the prevention and the detection of scientific misconduct and fraud.

Course 3.4 **Project Management** provides basics in project management with case scenarios and problem-solving strategies from the pharmaceutical industry.

# Module 4: Advanced Therapies & Integrated Concepts

The curriculum of Module 4 is divided into three courses:



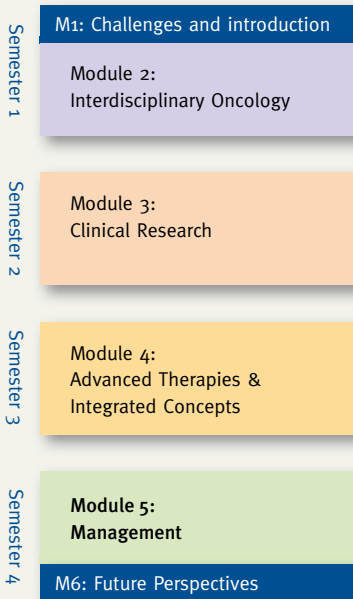
Course 4.1 **Clinical Oncology I** presents the current state of art and recent advances in the treatment of gynecological, urologic and gastrointestinal malignancies. Aspects of surgical intervention, radiotherapy and chemotherapy as well as targeted therapies are being discussed.

Course 4.2 **Clinical Oncology II** presents the current state of art and recent advances in the treatment of – among others – thoracic, hematological and pediatric malignancies. Aspects of surgical intervention, radiotherapy and chemotherapy as well as targeted therapies for different disease entities are being discussed by experts in the field.

Course 4.3 The **Integrated Therapeutic Concepts** course provides multidisciplinary approaches completing a patient-centered treatment approach. Topics include psycho-oncology, supportive care, complementary medicine and palliative medicine. In addition, on-site training in oncology-based communication scenarios is offered.

# Module 5: Management

The curriculum of Module 5 is divided into four courses:



Course 5.1 **Business Basics** provides an introduction to planning and strategic as well as human resources management for oncologists. Equally important is the introduction into accounting, finance and investment.

Course 5.2 **Health Care System** introduces to different health systems and aspects of compensation for health services.

Course 5.3 **Management of processes, entities and people** provides tools for assessing and improving leadership in oncology. This comprises classical topics such as practice and hospital management as well as behavioral economics.

Course 5.4 **Quality control** trains oncologists how to assess the quality of care from various perspectives. These analyses open opportunities for future improvements of cancer care.

## Exams and Pre-exam Assignments

In order to support our students in a continuous learning process, we provide additional mandatory pre-exam assignments during the entire study program.

### Pre-exam assignments:

- refer to the course contents
- help to keep on track with learning
- help to assess the state of knowledge concerning the course contents
- will not be graded but
- provide up to 3 ECTS credits which
- are the mandatory prerequisite for admission to the referring Module exam during the subsequent attendance seminar

### Exams:

In order to provide equal conditions to all our students, all exams:

- will be held during the attendance seminars
- will be graded
- provide up to 2 ECTS credits
- can be repeated twice in case of failure

## Master's Thesis (written in English)

### Within their Master's thesis students will:

- perform an original scientific project in the field of Interdisciplinary Oncology, Clinical Research, Advanced Therapies and Integrated Concepts or Management
- summarize the data in a written report in the context of published data
- critically discuss published data related to their project in a scientific presentation

### Prerequisites to start with the thesis:

- participation in the first attendance seminar and
- successful passing of the examination on Interdisciplinary Oncology

### Period from the assignment of the topic to the submission:

The Master's thesis takes 6 months from admission date to closing date. An extension of this period up to three month may be granted by the subject-specific board of examiners upon a reasoned request.

### Workload / Credits:

450 hours (15 ECTS)

# Application and Admission

## ■ Step 1: Eligibility Requirements

- 1) Bachelor degree in medicine or an equivalent degree at the level of – in general – four years of studies and **at least one year** of professional experience in oncology.

Bachelor degree in natural sciences<sup>1)</sup> or engineering<sup>2)</sup> or an equivalent degree at the level of – in general – four years of studies **and at least two years** of professional experience in oncology.

- 2) Sufficient command of the English language (e.g. TOEFL, IELTS or work experience in an English-speaking country).

These requirements do not apply if the applicant is a native speaker or if the Bachelor degree program completed was taught in English.

- 3) Upgrade of your ranking

The ranking among the other applicants (based on the overall grade point average of your Bachelor degree) will be upgraded if one of the following criteria is applicable and supported by documents

- a) At least three years of professional experience in oncology
- b) Completion of an additional qualification in oncology (e.g. specialist training board certification)
- c) Publications with a cumulative impact factor >10
- d) At least one year of relevant occupational experience in a foreign country
- e) Leadership experience (chair of department, oncology practice / center or research group)
- f) Third party funds raised independently

## ■ Step 2: Online Application System and Deadline

Applications are to be submitted via our Online Application System. For access and guidance see [www.masteroncology.de](http://www.masteroncology.de). The application period for enrollment in the program in October opens on December 1<sup>st</sup> and closes on April 15<sup>th</sup> of the corresponding year.

<sup>1)</sup> E.g. biology, biochemistry, biophysics, chemistry

<sup>2)</sup> E.g. biomedical engineering, biotechnology



### ■ Step 3: Interview

The best ranking applicants will be invited for a video interview (via Skype). In general, the interview appointments are scheduled in June/July. Selected applicants will be invited about two weeks before.

The video interview is conducted in English by the program's Selection Committee. The key aspects of occupational practice, expertise in oncology, additional qualifications as well as motivation for the study program will be discussed and evaluated. The evaluation also includes conduct during the interview in regard to manner of expression, command of the English language, the applicant's approach to explaining problems and conclusiveness of argumentation. The interview generally lasts 20 min.

### ■ Step 4: Admission

According to the Selection Committee's decision, Ulm University will provide the selected candidates with a formal admission notification. Acceptance of the seat in the program – within a given period of time – is mandatory. Otherwise admission is forfeited.

### Tuition Fee\*

The tuition fee is currently 4.875 € per semester. This includes all costs for the modules, tutorial guidance, online lectures, Master's thesis and exams. Payment is due upon receipt of payment notification which is issued in connection with admission / re-registration for each semester. Upon application, payment by installments may be granted in exceptional cases.

### Administrative Fee\*

An additional fee of currently 158,50 € per semester will be charged for administrative expenses and the student union.

### Attendance Seminar Expenses

Travel, living and accommodation costs during the attendance seminars are not included in the fee. For full board, an amount of about 120 € per day should be calculated.

### Fellowships

Under exceptional circumstances Ulm University and its partners do grant a very limited number of fellowships for the Master Online Program. Ask for details.

\* Fees are subject to change. Current fees see on [www.masteroncology.de](http://www.masteroncology.de)

## Students' Statements



**Lona Gaugler, scientist – Switzerland**

I joined the program because I think I have a strong molecular scientific background in oncology and it's a field that interests me a lot. But obviously there is the clinical aspect that needs to come into play. Currently, I work in the pharmaceutical industry, so I work with many people from the clinics. It's really important for me to get the view of the whole topic of cancer. I'm very grateful to be surrounded by all these people who have so much more experience than I do in that topic.

**Sergiu Brenister, surgeon – Moldova**

I mostly enjoyed the course on molecular biology, because it really shows the direction of correct treatment of patients.





### Blaise Nkegoum, pathologist – Cameroon

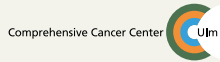
I think cancer is becoming more frequent, and I would like to develop my research in this topic because cancer will kill many people in developing countries, including my country. So I think I have many things to do in this area.

### Zeinab Elsayed, radiotherapist – Egypt

I found every aspect I need to modify my knowledge to date. I finished my MD 10 years ago, and this program covers areas like management and clinical research which are beneficial for my work.



## Cooperating Partners



### The Comprehensive Cancer Center Ulm (CCCU)

In July 2006, Ulm University Medical Center and the Medical Faculty of Ulm University Ulm founded the Comprehensive Cancer Center Ulm (CCCU). It originated from the Tumorzentrum Ulm which was established in 1984, initially supported by a program of the Federal Ministry of Education and Research (Bundesministerium für Bildung und Forschung, BMBF). This transition was considered necessary in order to meet the demands of modern oncology, i.e. truly multidisciplinary patient care, interactive and innovative clinical and laboratory research, high clinical trials activity, qualified training for health professionals, community service and outreach, as well as cancer prevention.

**Since 2009 the CCCU has been funded as an interdisciplinary oncology center of excellence by the German Cancer Aid (»Deutsche Krebshilfe«).**



### European School of Oncology

The European School of Oncology (ESO) was established in 1982 as a non-profit organisation exclusively dedicated to increasing the knowledge of health professionals in cancer care. The Master Online Study Program Advanced Oncology is an ESO-Recommended Program.

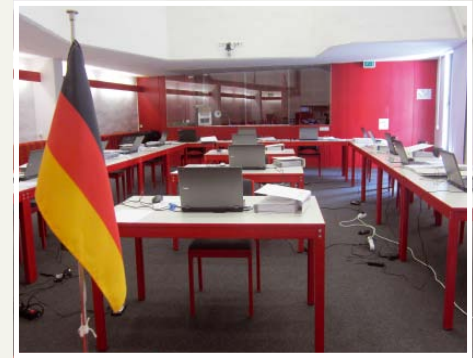
# Scientific Conference Center Reisenburg Castle

## A brief history of the Reisenburg Castle

First continuous settlements at the place of today's castle date back to the later Stone Age. The Reisenburg is among the oldest Alemannic castles.

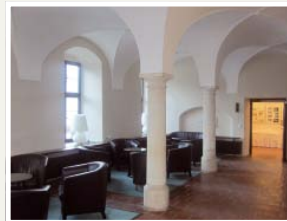
In the 10<sup>th</sup> century, the Bavarian dukes possessed the Reisenburg, but due to marriages, intrigues and warfares, possessors changed, and the castle was burnt in 1632. As we can see today, the castle was reconstructed. After the loss of feudalistic rights of the laird after the 1848 revolution, the Günzburg attorney Vogel acquired the Reisenburg in 1920. This attorney's widow sold the castle to the „International Institute for Scientific Cooperation“ under the leadership of professor Heilmeyer, the founding president of the University of Ulm.

Today, the Reisenburg serves as a modern science and communication center.



## Source:

<http://www.uni-ulm.de/reisenburg>



## Board of Directors

### Chairman



**Professor Dr. med. Jens Huober**

Chairman, Comprehensive Cancer Center Ulm (CCCU)  
Ulm University Medical Center

### Board of Directors



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Vice-President for Medicine, Ulm University  
Director, Dept. of Internal Medicine III, Director,  
Comprehensive Cancer Center Ulm (CCCU),  
Ulm University Medical Center



**Professor Dr. rer. nat. Thomas Wirth**

Dean, Faculty of Medicine, Ulm University  
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Dean of Studies, Faculty of Medicine, Ulm University  
Director, Department of Anatomy and Cytology  
Ulm University

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