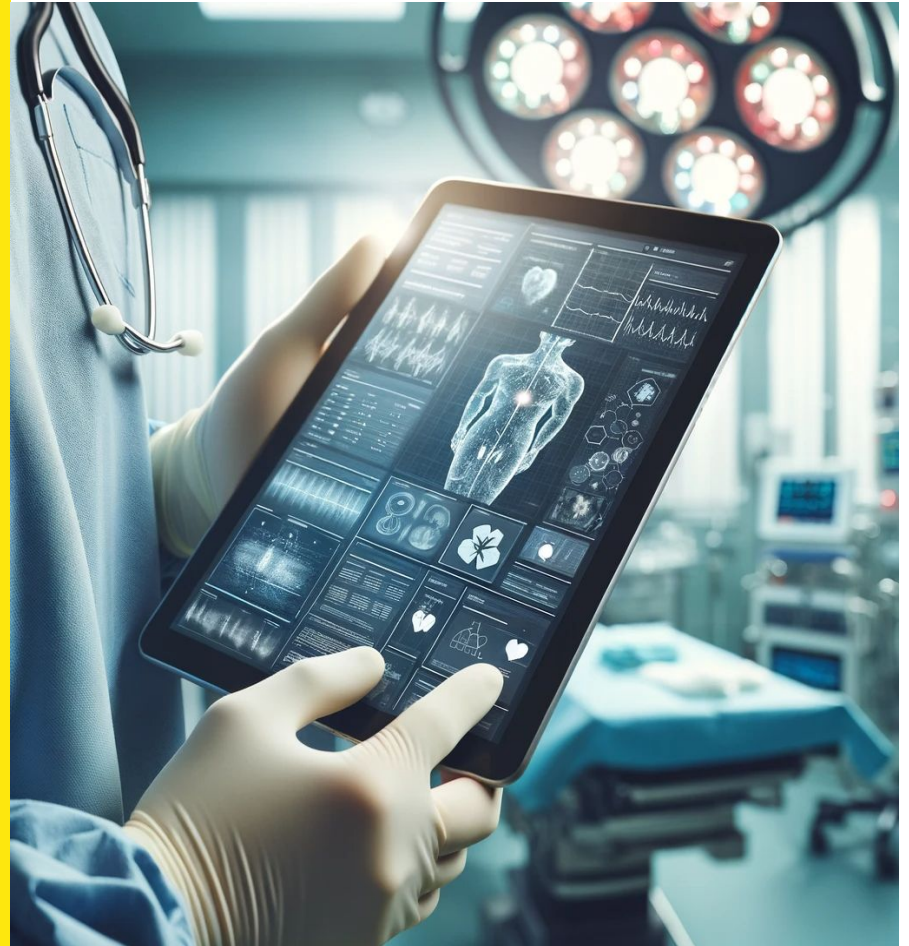


# Msc in Medical Informatics

*Educating the Shapers  
of Tomorrow's Healthcare*

04/02/2025



Are you interested in implementing **smart algorithms** to **prognose illnesses**?



Are you interested in working with healthcare professionals  
and **to bridge between medicine & informatics?**



# Are you ready to leverage **AI** to uncover the next pharmaceutical breakthrough?





Are you **looking for a career** in the healthcare industry  
in the Basel area?



Join us!



# The Team



**Uri Nahum**

Dean



**Hans-Friedrich  
Witschel**

Deputy Dean



**Julia  
Rausenberger**

J. Head  
Further  
Education



**Veronica Rosati**

Study admin



**Isabel del Rio**

Study support



**We live the  
Healthcare industry!!**





**We live the  
Healthcare industry!!**



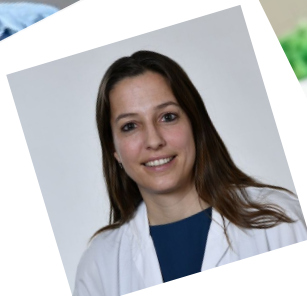
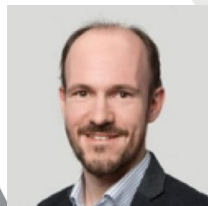
**We live the  
Healthcare industry!!**



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Healthcare industry!!**

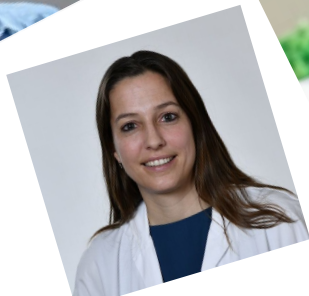


**We live the  
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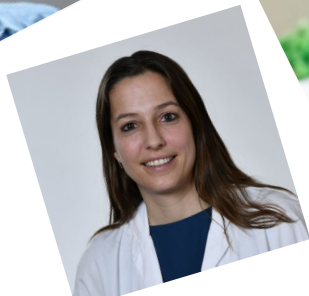
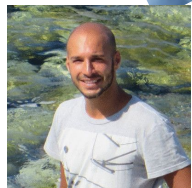




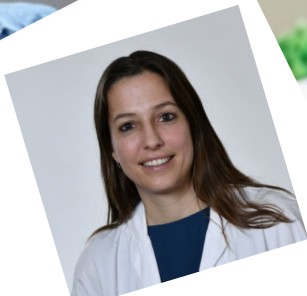
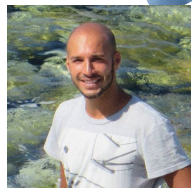
**We live the  
Healthcare industry!!**



**We live the  
Healthcare industry!!**



**We live the  
Healthcare industry!!**



8.9



"Topics very interesting and project was very informative and interesting, especially the connection to the industry."

"The lecturer and her team are great, and able to give good insights."

"I really enjoyed this course, as this topic is of high interest for me. The teaching style is entertaining and easy to follow and understand".

"Great module, keep it going!"

"The module i liked & LEARNED the most in this semester".

"At first the seminar work and an exam seemed too much for a 3 credit module but by the end, it all seemed totally worth it. This has been by far the best, most interesting 3 credit module."

Great Module with great teacher!

Very good lecture. Both lecturers were eager to support students, answered questions clearly and in general pleasant.

We live the industry!!



NeoPredix



Swiss TPH



emovocare



# Our connection with the industry



Info Master of Science in Medical Informatics

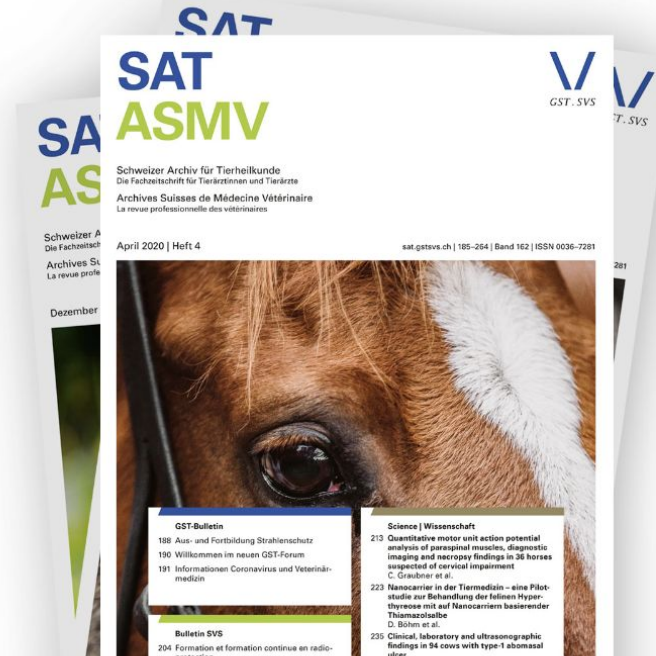
## University Children's Hospital Basel

2d ...

4,257 followers

Das **University Children's Hospital Basel** setzt auf die Chancen, die sich mit der digitalen Transformation ergeben. Wir sehen schon heute, wie intelligenten Datenanalysen und maschinelles Lernen die Gesundheitsversorgung von Kindern und Jugendlichen verbessern kann. Daher freuen wir uns auf viele interessierte Studierende – und noch mehr auf künftige Absolvent\*innen dieses wegweisenden Studiengangs!

# The extra mile for each student!



«Diese Tools sind nicht die Zukunft,  
sondern die Gegenwart»


Zwei Tierärztinnen wagen sich ans Programmieren und an  
Big Data: Berenice Bönhof und Sarah Rebecca Meyer absolvieren einen  
Masterstudiengang in Medizininformatik.





# The extra mile for each student!


MONDAY



• 11:00 AM

Hi Uri,  
First of all I wish you happy holidays and a good start into the new year! I wanted to let you know that I signed the contract with Roche and will start  in February! :) thanks again for all your help to getting this opportunity.  
Best,

TODAY



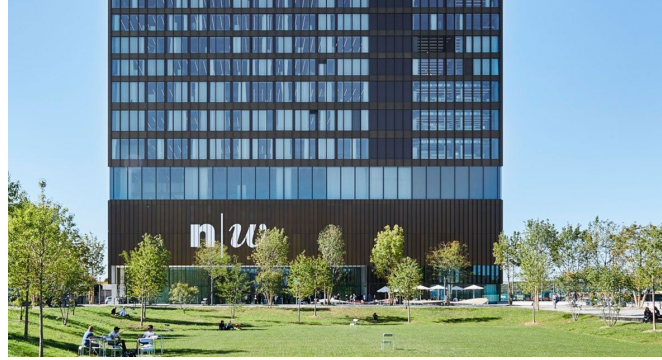
**Uri Nahum** • 8:39 AM

Dear ,

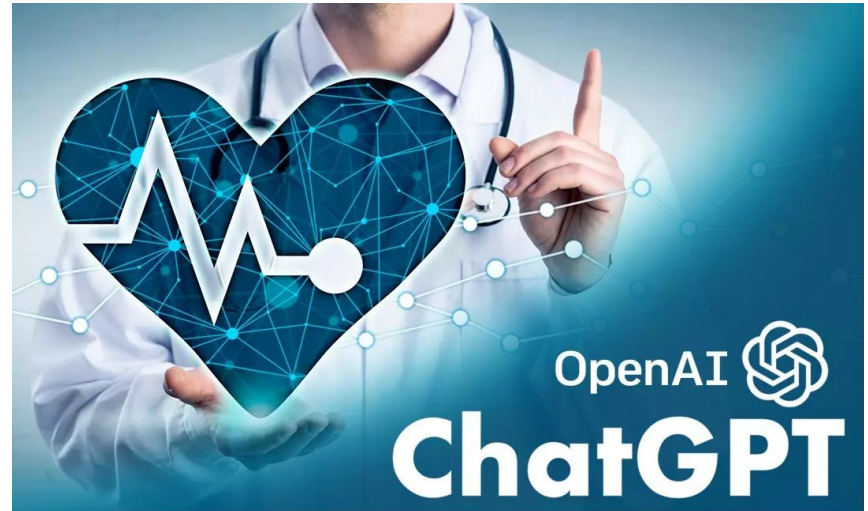
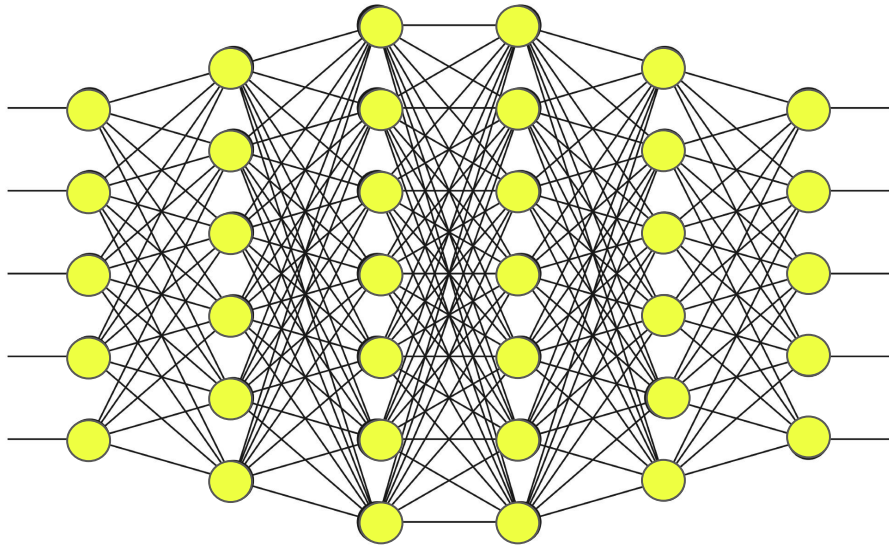
Congratulations on your new role at Roche! I'm thrilled to hear about your success and glad to have been part of your journey. Keep up the great work, and let me know if you need my support in the future.

Uri

# Our Campus



# Contribute to all innovations!





# Medical Informatics

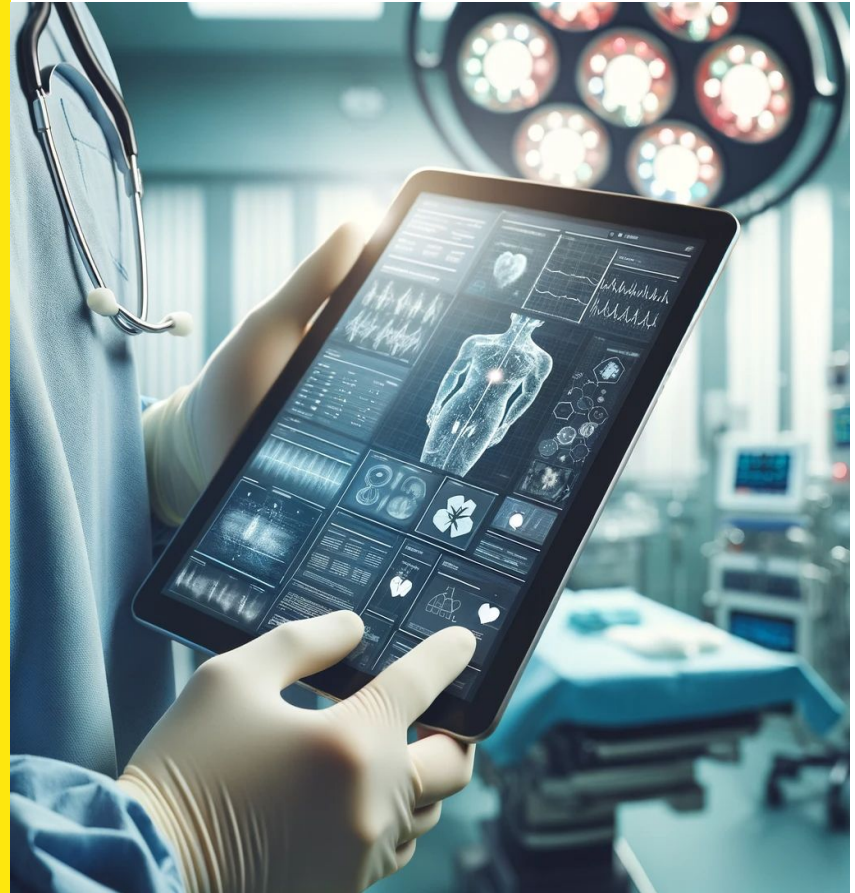


# Pharma Informatics





# The Program



# MEDICAL INFORMATICS

# PHARMA INFORMATICS

## Core modules both specializations

Digitalization  
in healthcare

6

Digital  
transformation  
in healthcare

6

Master Thesis

30

Medical data  
science

6

Foundations  
of Pharma

6

48 ECTS

## Specialization electives

Medical  
software  
development  
(core  
elective)

6

Medical  
informatics  
internship

6

Medicine and  
informatics

3

Applied  
computational  
intelligence

6

Machine  
learning in  
medicine

3

Development  
of Medicines  
and Medical  
Devices

3

Business  
intelligence

6

Biomarkers

3

Innovative  
trends in  
pharma  
informatics

3

Pharma  
internship

6

Applied mathematics  
and informatics  
Drug Discovery & Mathe-  
matical and Computa-  
tional Biology in  
Drug Discovery (core  
elective)

4

Clinical decision  
support  
systems

3

HMI & bias  
mitigation

3

Cyber  
security in  
digital health

3

Quantum  
computing

3

Digital  
biomarkers

3

Cloud  
Computing

6

Laboratory  
automation in  
pharma  
industry

3

Artificial  
intelligence in  
drug  
discovery

3

Pharmaco-  
kinetics and  
dynamics

3

Specialization elective from Pharma Informatics can be taken as general electives for Medical Informatics and vice versa

≥ 24 ECTS

## General electives

Data science

6

User-  
centered  
design and  
design  
thinking

3

IT  
governance,  
risk, and  
compliance

6

Knowledge  
processing  
and decision  
making

6

Healthcare  
entrepreneur-  
ship

3

rest ECTS

## Foundation pre-courses

Informatics  
foundations

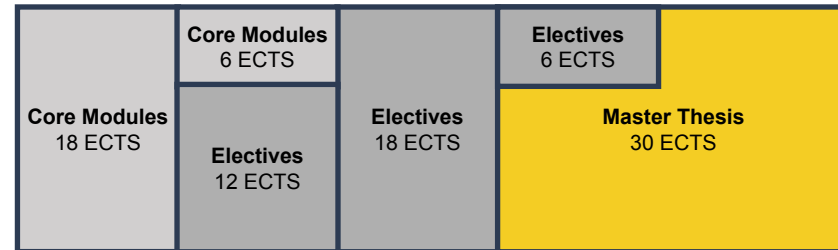
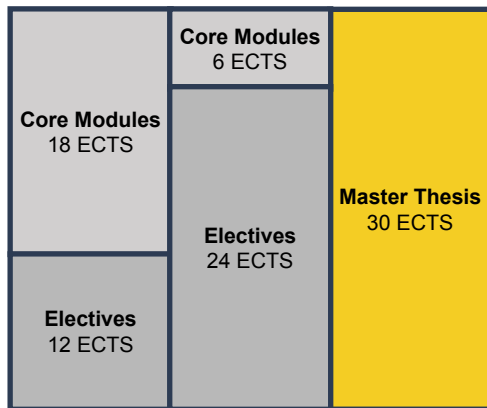
Life  
science  
foundations

Mathematics

Business  
information  
systems

Σ 90 ECTS

# Master in Medical Informatics



# What do you actually learn?

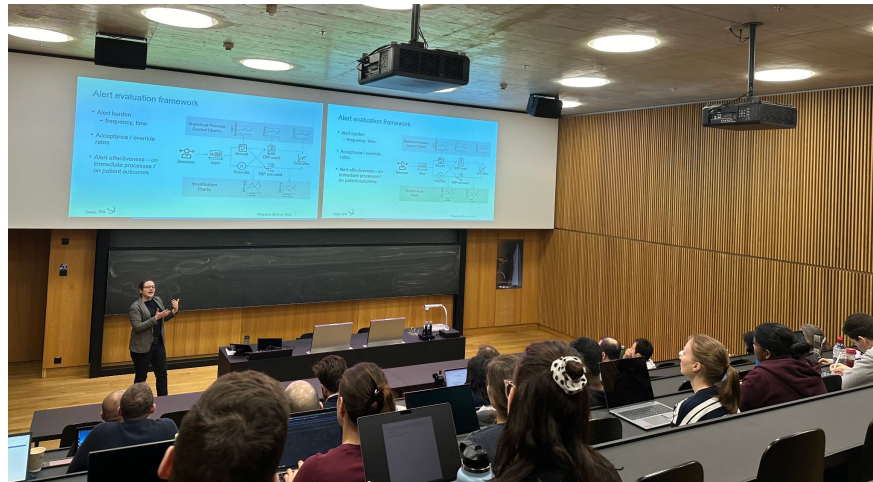
Medical software  
development





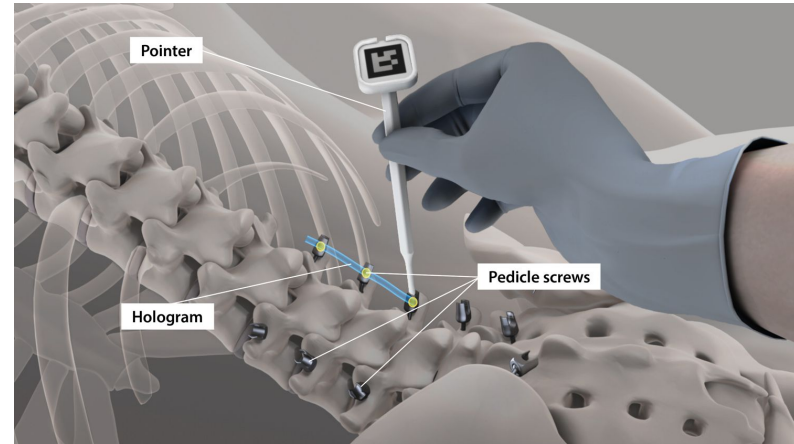
# What do you actually learn?

## Clinical Decision Support systems



# What do you actually learn?

Medicine and Informatics



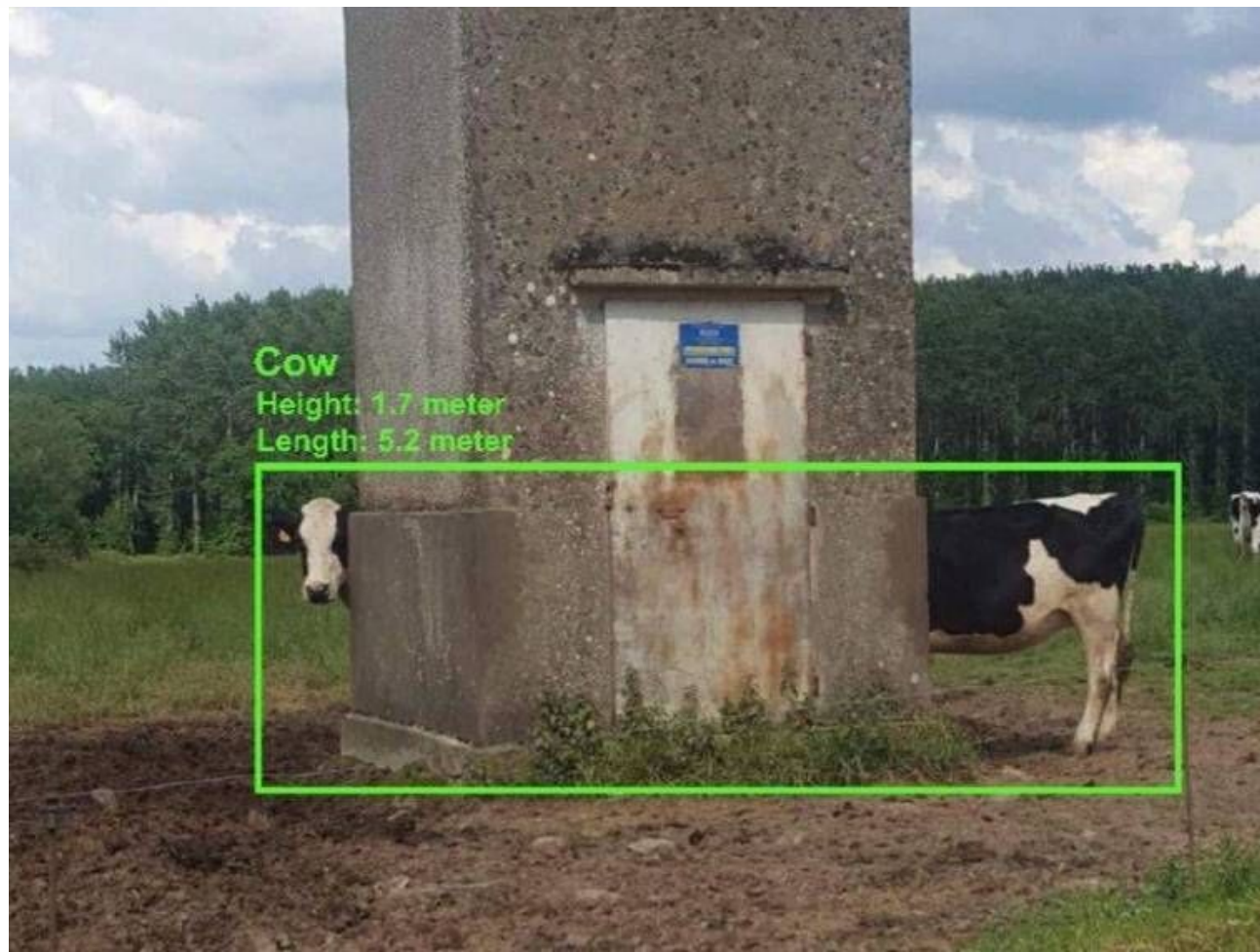
# What do you actually learn?

Mathematics and  
informatics in drug  
discovery









# Autumn Semester (more or less)

	8:30 – 12:15		13:30 – 17:15
Monday			
Tuesday			
Wednesday	<b>Digital Transformation in Healthcare</b>		<b>Medical Data Science</b>
Thursday			<b>Digitalization of Business Processes in HC / Pharma Foundations</b>
Friday		<b>Mathematics &amp; Informatics in Drug Discovery</b>	
Saturday			

# Autumn Semester (more or less)

	8:30 – 12:15		13:30 – 17:15
Monday	Digital Biomarkers		Development of Medicines & Medical Devices / Pharmacokinetics and Pharmacodynamics
Tuesday	Data Science / Innovative Trends in Med Informatics		Business Intelligence
Wednesday	<b>Digital Transformation in Healthcare</b>		<b>Medical Data Science</b>
Thursday	Machine Learning in Medicine / Applied Quantum Computing		<b>Digitalization of Business Processes in HC /</b> <b>Pharma Foundations</b>
Friday		<b>Mathematics &amp; Informatics in Drug Discovery</b>	
Saturday			

# Spring Semester (more or less)

	8:30 – 12:15		13:30 – 17:15
Monday	Genetic Biomarker		Laboratory automation in the pharmaceutical industry
Tuesday	Artificial Intelligence in Drug Discovery		Healthcare Entrepreneurship / Medicine and Informatics
Wednesday	Cyber Security in Health / HMI & Bias Mitigation		<b>Medical Software Development</b>
Thursday	Cloud Computing		
Friday		<b>Computational Biology in Drug Discovery</b>	
Saturday			



ChatGPT 4o ▾

I have a B.Sc. degree and I am considering to do the master of Medical Informatics in the FHNW in the Basel area, Is it a good choice?

ChatGPT 4o ▾

I have a B.Sc. degree and I am considering to do the master of Medical Informatics in the FHNW in the Basel area, Is it a good choice?



Pursuing a Master of Science in Medical Informatics at the University of Applied Sciences and Arts Northwestern Switzerland (FHNW) in the Basel area is a commendable choice, especially given your Bachelor of Science background. This program is designed to equip students with advanced knowledge in information technology tailored for the medical and pharmaceutical sectors. Key areas of focus include biomedical data analysis, artificial intelligence applications, visualization technologies, big data management, and the economic aspects of digitalization in healthcare.

FHNW

#### Program Highlights:

- **Specializations:** The program offers two specializations:
  - **Medical Informatics:** Emphasizes the impact of digitalization on drug development, hospital processes, and the broader health sector, with a significant focus on personalized medicine.
  - **Pharma Informatics:** Leverages Basel's status as a global hub for pharmaceutical innovation, concentrating on artificial intelligence's role in drug discovery and development. FHNW
- **Practical Experience:** The curriculum includes numerous internships, allowing students to analyze health data and develop software solutions for hospitals and the pharmaceutical industry. Leading healthcare providers actively participate in the program, offering seminars

Designed for BSc graduates in Medical Informatics, as well as related disciplines such as Computer Science/Informatics, Master of Medicine, Pharmaceutical Sciences, Life Sciences, or similar fields that meets the programming/medicine knowledge requirements.

**Admission:**

Highly qualified graduates are admitted to the master's programme if they:

- have acquired a Bachelor's degree in a relevant field with a grade of A, B, or  $\geq 4.8$  ( $\geq$  "good"),
- or possess an equivalent educational background and professional experience (college or university degree),
- and have successfully passed the interview,
- and demonstrate a very good command of the English language.

Pre-master's courses are available for reflecting the required prior knowledge. Completion of these courses may be declared by the Admissions Committee as a prerequisite for starting the programme. These courses begin before the semester starts and are free of charge.

# I am interested! What's next?

**You have to submit the Following:**

- **Copy of ID card / pass**
- **Letter of Motivation**
- **Bachelor's degree**
- **CV**
- **Copies of certificates**
- **English certificate**





# I am interested! What's next?

- **Admission fees** : 200 CHF
- **Semester fees:**  
CHF 750.- per semester (Swiss, Liechtenstein), CHF 1000.-  
(EU), otherwise CHF 5000.-
- 100 CHF materials and licences.

# **Master in Medical/Pharma Informatics**

***the doorway to your  
Future***

