

# Organization of modules - How to plan your master course

Fachgruppe  
Material-  
wissenschaft


# Study information


New Material Science Students


# Master organization

The Materials Science Master is divided into the following modules which the student is expected to finish in the ideal period of 2 years

Sem.	CP	Module 1	Module 2	Module 3	Module 4
winter	I 30	Synthesis & Properties of Inorganic Materials 6 CP	Advanced Materials Science Laboratory 9 CP	General Studies 9 CP  (click the plus button at Compulsory Elective Modules on Campus)	Materials Science Specialization I (12-18 CP) Specialization II (12-18 CP)  Polymer Science & Plastic Engineering Advanced Materials Characterization Functional Materials Inorganic Materials Chemistry Materials Theory and Simulation Metals and Structural Materials Nanomaterials and Nanostructures Soft Matter and Biomaterials
summer	II 30	Atomic Transport & Phase Transformations 6 CP	Polymer Materials Science 9 CP		
winter	III 30	Advanced Science Seminar 6 CP	Practical Skills and Project Planning (related to the topic of the Master Thesis) 15 CP		
summer	IV 30	Master Thesis 30 CP			

 Compulsory Materials Science Modules

 Compulsory Elective Materials Science Modules  
—> specialize in two subjects

 Thesis Preparation and Master Thesis  
—> depends on the choice of Thesis topic

 Compulsory Elective General Studies Modules

# Master organization - Compulsory Materials Science Modules

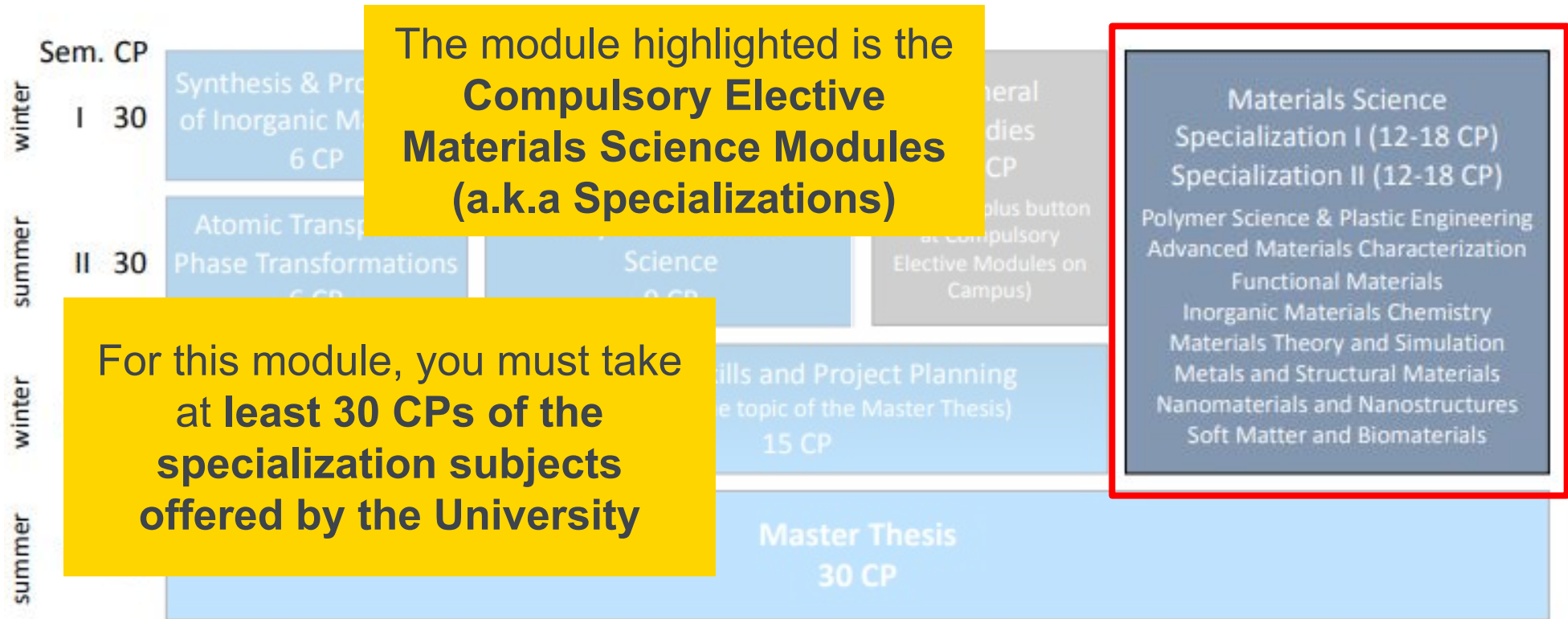
Sem.	CP	Module Name	CP
winter	I 30	Synthesis & Properties of Inorganic Materials 6 CP	Advanced Materials Science Laboratory 9 CP
summer	II 30	Atomic Transport & Phase Transformations 6 CP	Polymer Materials Science 9 CP
winter	III 30	Advanced Science Seminar 6 CP	Practical Skills and Project Planning (related to the topic of the Master Thesis) 15 CP
summer	IV 30	Master Thesis	

The modules highlighted are the **Compulsory Materials Science** modules.

They are only offered **once a year**, so be aware of the dates and **plan yourself based on this!**

As the name says, the **completion of those modules is mandatory!** It is planned in such a way that all students gain the **same common knowledge in the most important Materials Science topics.**

# Master organization - Compulsory Elective Materials Science Modules



The module highlighted is the **Compulsory Elective Materials Science Modules (a.k.a Specializations)**

For this module, you must take at least **30 CPs** of the **specialization subjects** offered by the University

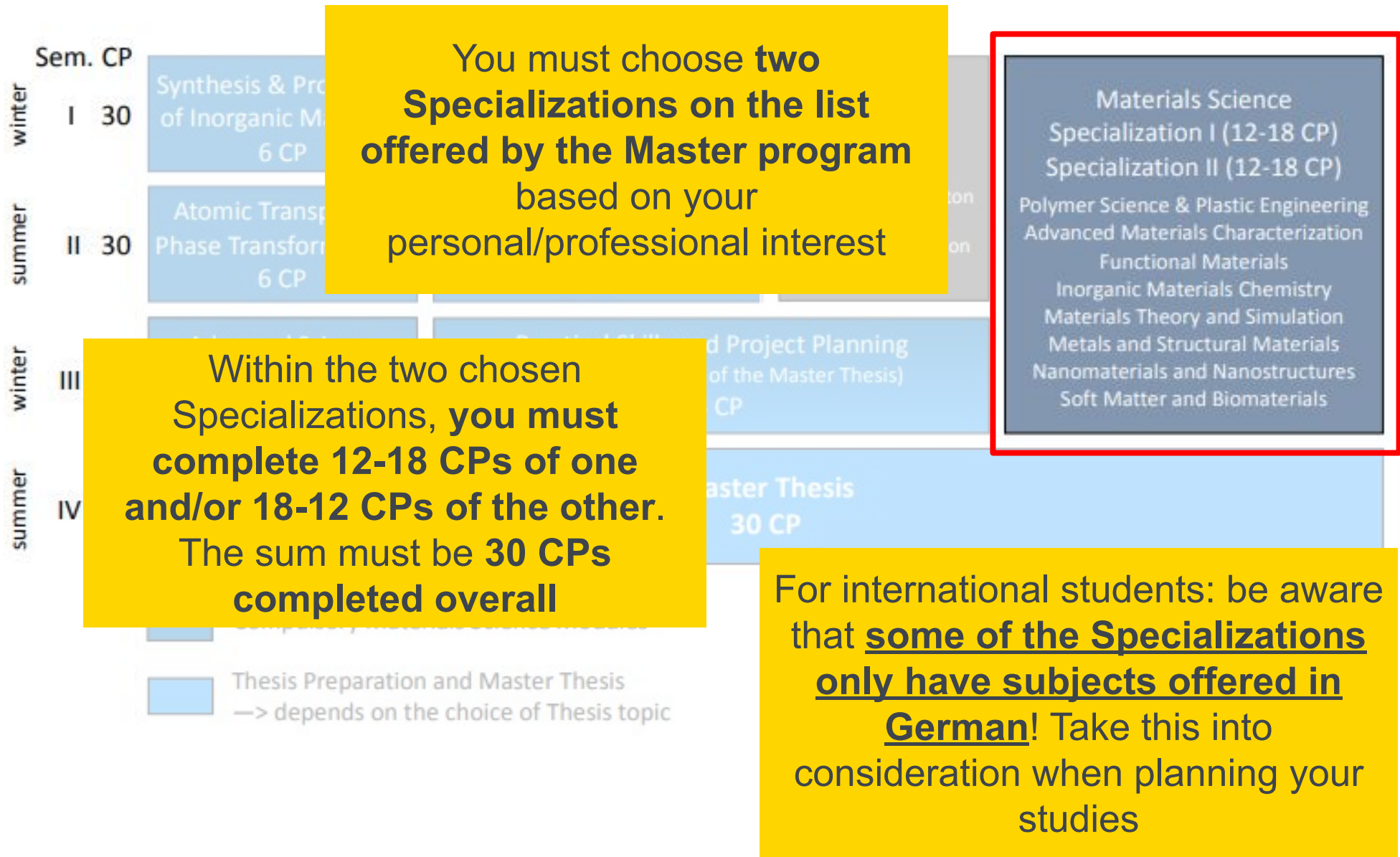
This are, together with the Compulsory Materials Science Modules, the most important subjects you will have on the Master program!

- Compulsory Elective Materials Science Modules → specialize in two subjects
- Co

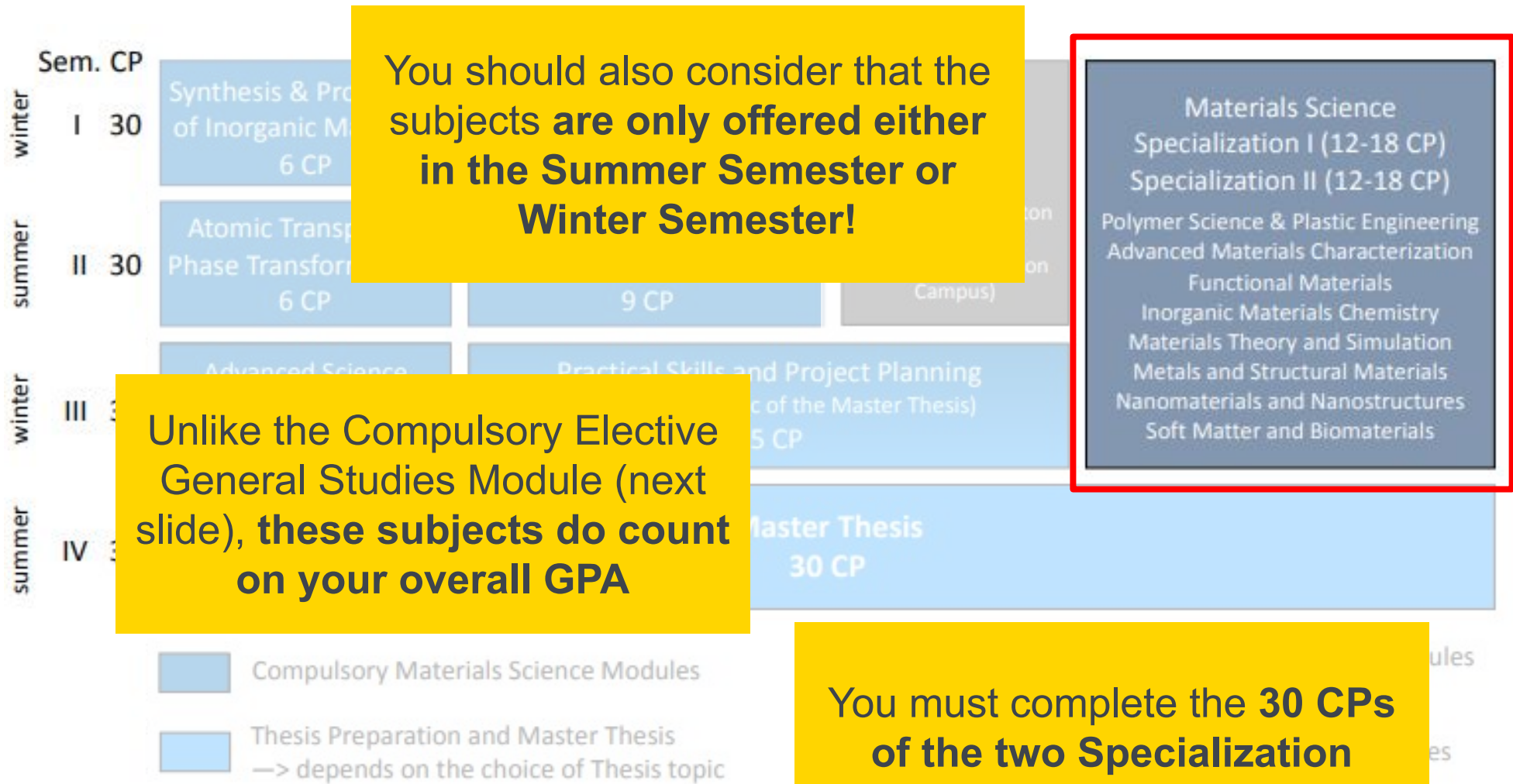
Click here to see the table of Specialization Subjects



# Master organization - Compulsory Elective Materials Science Modules



# Master organization - Compulsory Elective Materials Science Modules



You should also consider that the subjects are only offered either in the Summer Semester or Winter Semester!

Unlike the Compulsory Elective General Studies Module (next slide), these subjects do count on your overall GPA

- Materials Science Specialization I (12-18 CP)
- Materials Science Specialization II (12-18 CP)
- Polymer Science & Plastic Engineering
- Advanced Materials Characterization
- Functional Materials
- Inorganic Materials Chemistry
- Materials Theory and Simulation
- Metals and Structural Materials
- Nanomaterials and Nanostructures
- Soft Matter and Biomaterials

You must complete the 30 CPs of the two Specialization subjects in order to graduate

# Master organization - Compulsory Elective General Studies Module

The module highlighted is the **Compulsory Elective General Studies Module**

General Studies  
9 CP  
(click the plus button at Compulsory Elective Modules on Campus)

The grade for those modules is **not counted on your overall GPA**, so you can enjoy them without the pressure of getting a 1,0 grade!

For this module, you must take at **least 9 CP of whatever subject you'd like!**

Those subjects can be **related to the topic** (e.g. analysis techniques, programming, etc) **or unrelated to the topic** (project management, language courses, etc)

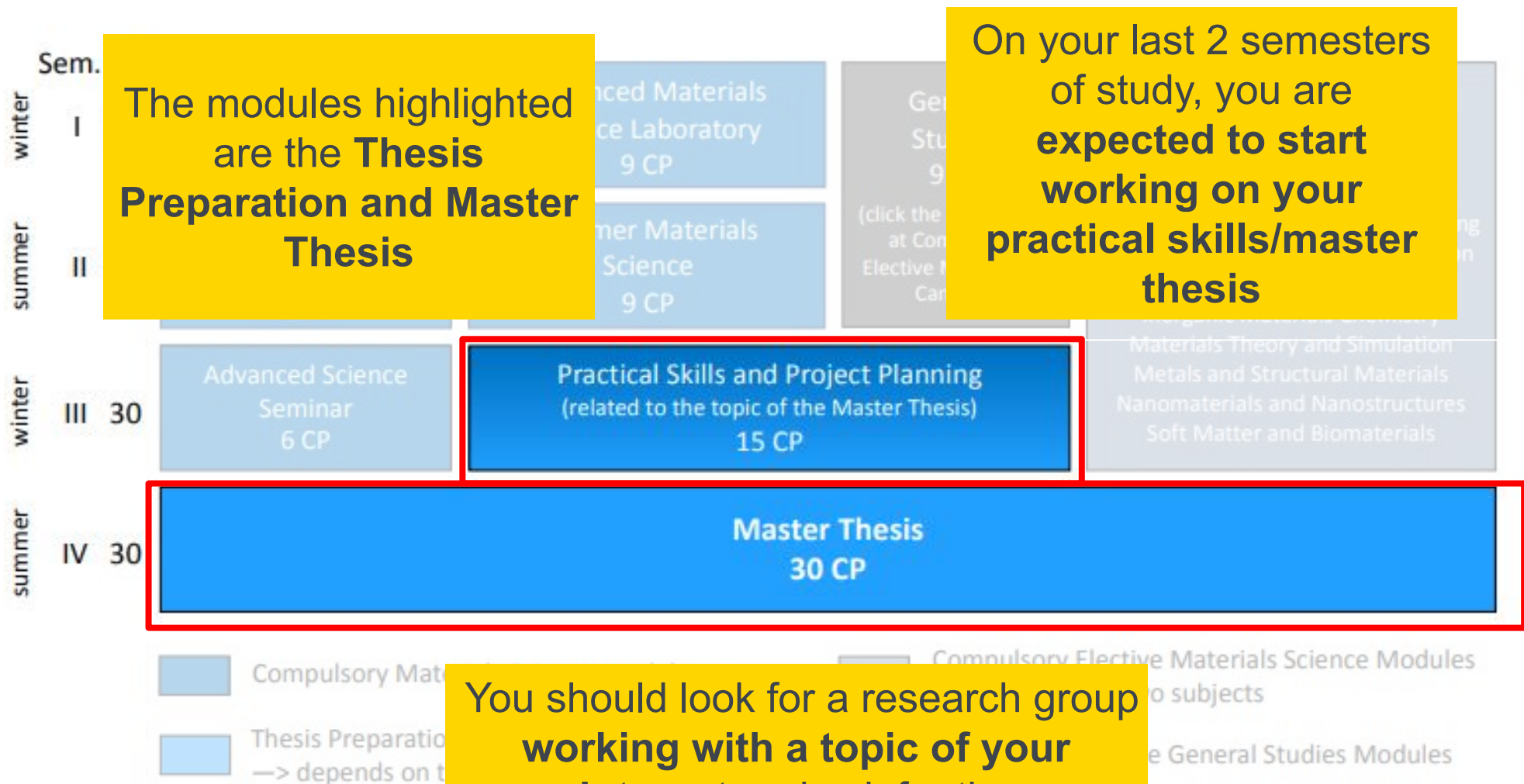
Compulsory Materials Science Modules

Thesis Preparation and  
-> depends on the choice of topic

Materials Science Modules  
subjects

General Studies Modules

# Master organization - Compulsory Elective General Studies Module



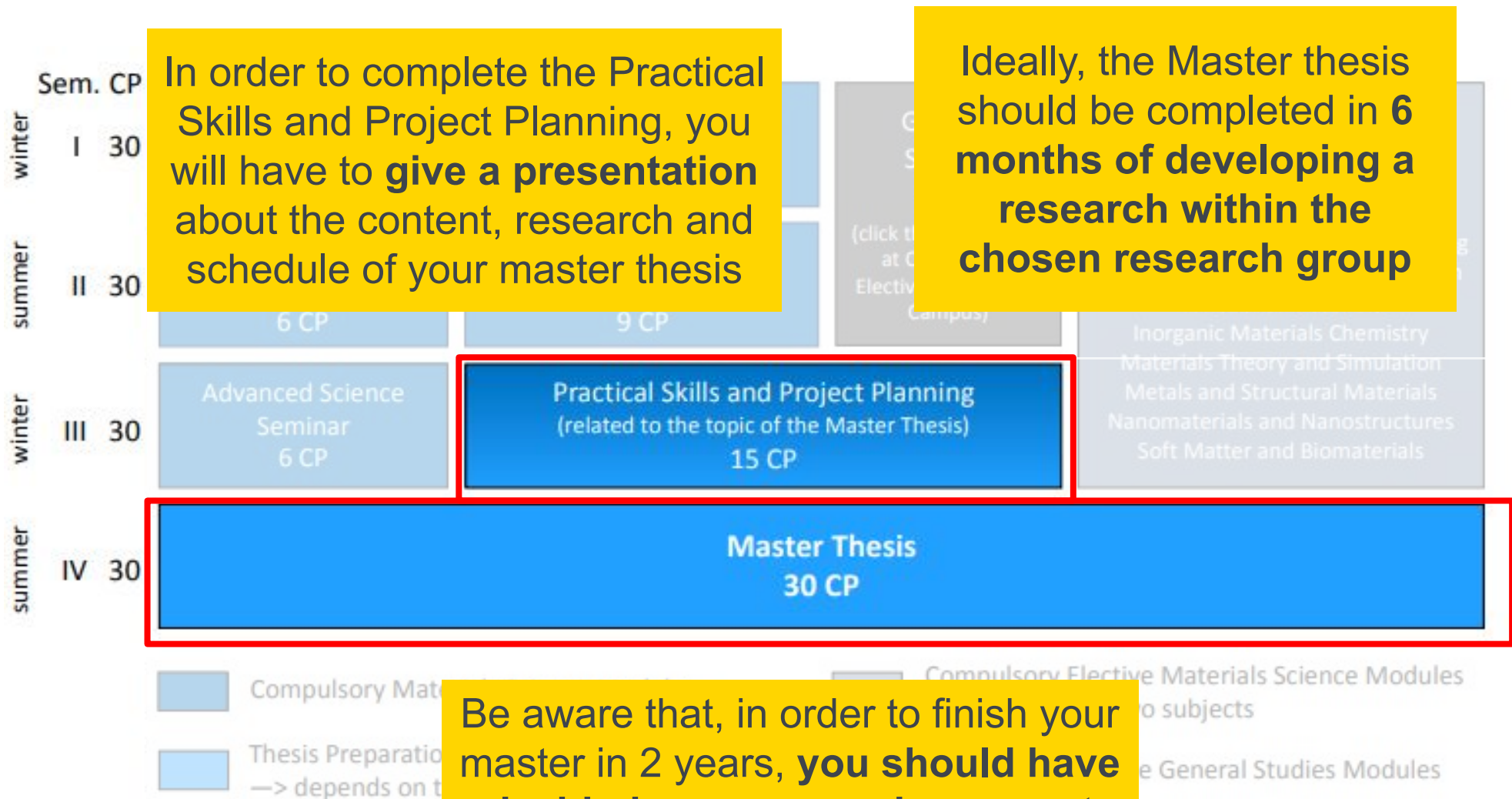
The modules highlighted are the **Thesis Preparation and Master Thesis**

On your last 2 semesters of study, you are **expected to start working on your practical skills/master thesis**

You should look for a research group **working with a topic of your interest** and ask for the **opportunity to develop your thesis with them**



# Master organization - Compulsory Elective General Studies Module



# Before the semester

## How to choose and register thesis?

### Choosing a thesis topic:

1. Check out the research that is being done by the professors - you can choose professors from the materials science institute but you can also look in other departments (physics, chemistry,...) or at the MPI
2. Contact the professors or supervisors whose research you are interested in - you will probably always be able to find an interesting thesis topic together - because the study program is relatively small there usually is no competition about thesis topics
3. Always meet with your supervisor before finally choosing a thesis topic - having a good feeling about the supervisor is probably as important as the thesis topic itself

It is also possible to do your master thesis externally at a company or institute, but be aware that you have to find a professor that is willing to examine your thesis (this can sometimes be tricky) - **do not start a thesis externally when you haven't found a professor who has agreed to examine you**

# Before the semester

## How to choose and register your thesis?

### Registering the thesis:

Be aware: Before you start with your thesis you will already do the Module “Practical skills and project planning” which is meant for you to already start preparing your master thesis - therefore you should choose your thesis topic before starting this module! - start to think about it as early in your studies as possible

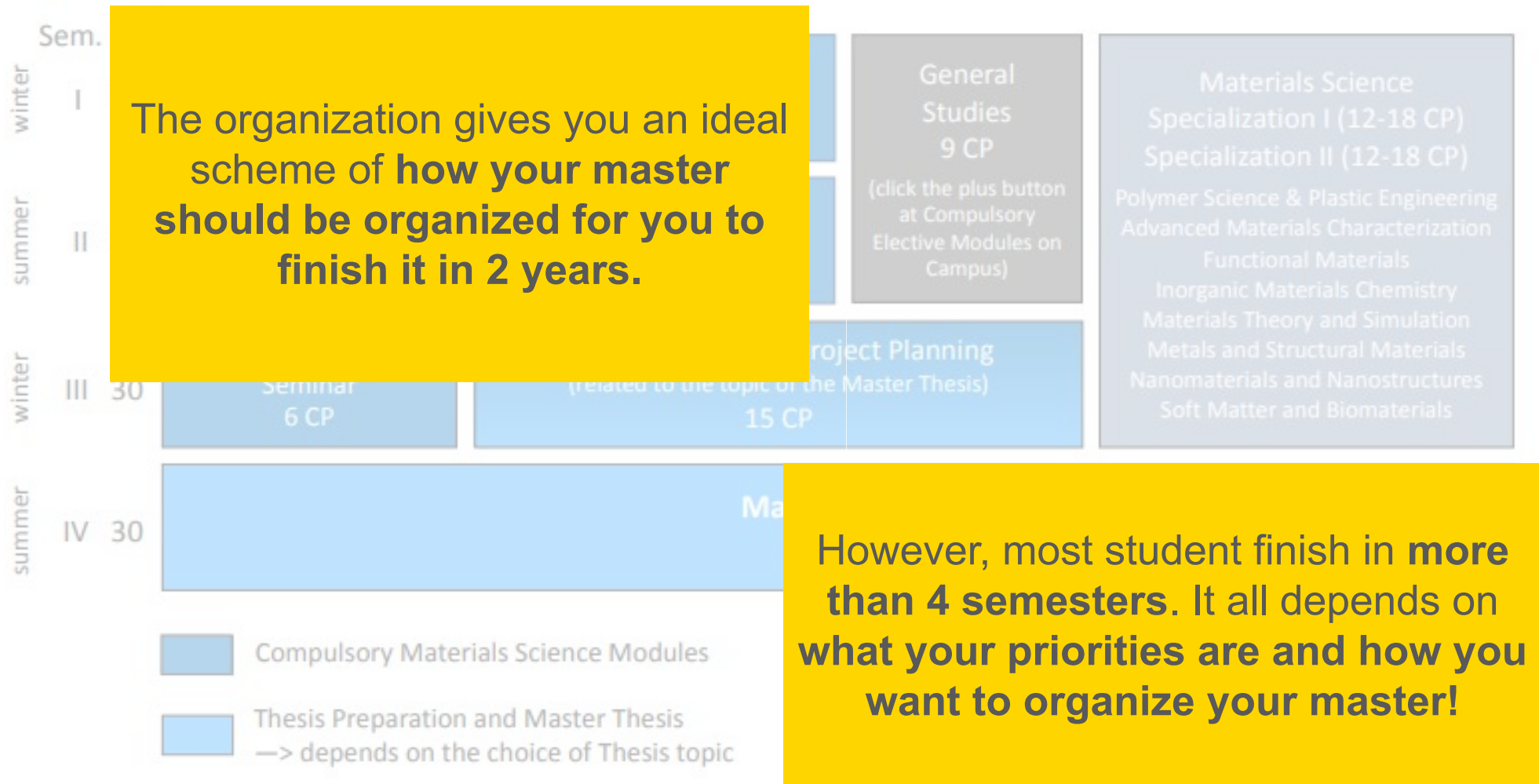
To formally register your thesis you have to:

- submit a form to the examination office - it can be found in C@mpus under “My applications”
- and an internal form of the respective Institute.

Both forms have to be signed by **both examiners** and the head of the examination committee (Prof. Bill).

After officially registering your master thesis, you have 12 months time to finish it - the master thesis has 30 ECTS ,so **you can finish your thesis in 6 months when working on it full time** or you have the possibility to do it part time and finish it later

# Modules organization



# Still have questions?

## Come talk to the Fachgruppe!

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Address: Pfaffenwaldring 55 (V55.ZG.634)

