

# Scientific Instrumentation

## Instruction sheet for the Master's Thesis

Condition to begin the Master's thesis:

All exams (including labs) as well as the Research Internship must have been cleared!

1. Search for a possible Master's Thesis place in a scientific institute or an R&D department in industry. The topic should fit to your interest as well as to the program Scientific Instrumentation.
2. Get a title and a description of the task.
3. Contact a professor whose own field of research is close to the projected topic. Ask him for a statement if the projected task is appropriate for a Master's Thesis and if he would be willing to be the Academic Supervisor.
4. Fill the form "Application for the Approval of Orientation Work into the Subject Matter for a Master's Thesis" and sign it.
  - a) Get the signature of your internal mentor.
  - b) Get the signature of your academic supervisor.
  - c) Bring your filled application form, to the course leader for approval.

You may come in person during the announced contact hours, drop the papers into the postbox (in front of the Dean's office) or send it by post (not by email as original signatures are required).

If you do not come in person please add an envelope\* with your address so that the approved form can be sent to you by post (no stamp required).

Please take care to receive and keep the approved form!
5. After having received the approval of your application make a contract with your Master's Thesis provider. If your Master's Thesis provider does not have his own contract form you may use the form provided by the Praktikantenamt: [http://www.eah-jena.de/~karthe/download/doc/Download\\_Abschluss/AB\\_Vertrag\\_extern.doc](http://www.eah-jena.de/~karthe/download/doc/Download_Abschluss/AB_Vertrag_extern.doc)
6. Bring or send the contract and the signed application form to the Praktikantenamt III (room 04.02.44, <http://www.fh-jena.de/~karthe/>) for agreement.
7. After you have become acquainted with your thesis topic fill the form "Application for the Assignment of the Master's Thesis Topic".
  - a) Get the signature of your internal mentor.
  - b) Get the signature of your academic supervisor.
  - c) Print out a marksheet proving that all exams of semesters one and two have been cleared. Use the form "Check of cleared exams" to check if all the required exams are confirmed. In case you have cleared an exam but it is not listed on the marksheet please contact the examiner and ask for a written confirmation.
  - d) Bring your filled application form with your marksheet and the filled form "Check of cleared exams" to the course leader for approval.

You may come in person during the announced contact hours, drop the papers into the postbox (in front of the Dean's office) or send it by post (not by email as original signatures are required).

If you do not come in person please add an envelope\* with your address so that the approved form can be sent to you by post (no stamp required).

Please take care to receive and keep the approved form!

8. After Application for the Assignment of the Master's Thesis Topic has been approved the title of the Master's Thesis is fixed and may not be changed or modified.
9. Within 18 weeks after the approval of your application you have to submit two bound copies of your Master's thesis to the dean's office.
10. A submission will usually not be accepted earlier than 4 weeks after the approval of your application.

Please consider that the Orientation Work into the Subject Matter for a Master's Thesis is voluntarily, it is not a compulsory part of the course. This may have legal, fiscal and financial implications for the contract with your Master's Thesis provider.

The compulsory Master's Thesis starts officially with the approval of the "Application for the Assignment of the Master's Thesis Topic". Therefore, an early Application for the Assignment of the Master's Thesis Topic is strongly recommended.

\* Envelope for posting the approved form to you: Size C6 (114 mm x 162 mm) or C5/6 (110 mm x 220 mm) with your address as the receiver's address placed as specified by the German Post.

## Check of cleared exams

When you like to apply for approval of the Research Internship or assignment of the Master's Thesis Topic: Please fill this form in Microsoft Word using the dropdown boxes with all your data and submit a signed printout together with your marksheet and the respective application.

Surname / Family name	
First / Given name(s)	
Date of birth (dd, mm, yyyy)	
Matrikel no.	
E-Mail address	
I have entered Scientific Instrumentation in	WS 20 /

*I have cleared the following examinations:*

Sem.		Credits	Prerequisites (e.g. lab course)	Exam	Credits confirmed on marksheet
1	Embedded Digital Systems	6	<input type="checkbox"/>	<input type="checkbox"/>	
1	Optical Instruments	6	<input type="checkbox"/>	<input type="checkbox"/>	
1	Physical Materials Diagnostics	6	<input type="checkbox"/>	<input type="checkbox"/>	
1	Solid State Physics	6		<input type="checkbox"/>	
1	Microsystems Engineering	3		<input type="checkbox"/>	
1	Design of Precision Devices	6	<input type="checkbox"/>	<input type="checkbox"/>	
1	Introduction to FEM	3	<input type="checkbox"/>	<input type="checkbox"/>	
1	Non-Technical Module 1 Enter the name of the module	3		<input type="checkbox"/>	
	<b>Sum of credits of semester 1</b>				
2	Micro- and Nanotechnology: Micro- and Nanostructures	6	<input type="checkbox"/>	<input type="checkbox"/>	
2	Thin Films	3	<input type="checkbox"/>	<input type="checkbox"/>	
2	Smart Materials and Sensors Materials for Sensors and Electronics	6	<input type="checkbox"/>	<input type="checkbox"/>	
2	Selected Topics of Sensor Technology	3		<input type="checkbox"/>	
2	Scientific Computing	9		<input type="checkbox"/>	
2	Metrology and Analytics Gas Sensing and Aerosol Measurement	6	<input type="checkbox"/>	<input type="checkbox"/>	
2	Instrumental Chemical Analytics	3	<input type="checkbox"/>	<input type="checkbox"/>	
2	Design Advanced 3D-Design	3	<input type="checkbox"/>	<input type="checkbox"/>	
2	FEM and Simulation	3	<input type="checkbox"/>	<input type="checkbox"/>	
2	Precision Instrumentation	3		<input type="checkbox"/>	
2	Non-Technical Module 2 Enter the name of the module	3		<input type="checkbox"/>	
	<b>Sum of credits of semester 2</b>				
3	Soft Skills Enter the name of the module	3		<input type="checkbox"/>	

Date	Today's date
Signature	

**Appendix 4**

**Application for the Approval of Orientation Work  
into the Subject Matter for a Master's Thesis**

Mr./Ms. \_\_\_\_\_

hereby requests that the following assignment be approved as orientation work into the subject matter for a Master's thesis for the degree programme in Scientific Instrumentation.

Email address of the student: \_\_\_\_\_

Description of assignment:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Institution's name \_\_\_\_\_

and address: \_\_\_\_\_

Name of the internal mentor: \_\_\_\_\_

Phone number: \_\_\_\_\_

I declare that I will observe rules of good scientific practice.

Place, Date: \_\_\_\_\_ Signature: \_\_\_\_\_

*Student*

**Support by the internal mentor:**

I, the undersigned \_\_\_\_\_ will support the student as the internal mentor.

*Name*

Place, Date: \_\_\_\_\_ Signature: \_\_\_\_\_

*Internal mentor*

**Academic support by a Professor of the SciTec Department or a Professor of the Jena University of Applied Sciences who is teaching in the programme Scientific Instrumentation:**

I, the undersigned \_\_\_\_\_ hereby second the application in its substance

*Name*

and will act as the academic supervisor.

Place, Date: \_\_\_\_\_ Signature: \_\_\_\_\_

*Academic supervisor*

**Approval by the course leader Scientific Instrumentation:**

The application is hereby approved. If applicable the student is instructed to sign an internship contract with the internship provider prior to the start of the field work phase.

Place, Date: \_\_\_\_\_ Signature: \_\_\_\_\_

*Course leader Scientific Instrumentation*

Appendix 5

**Application for the Assignment of the Master's Thesis Topic  
for the Degree Programme "Scientific Instrumentation"**

Surname, First Name: \_\_\_\_\_ Registration-No. \_\_\_\_\_

Email address: \_\_\_\_\_

A Address during Master's Phase:  
\_\_\_\_\_  
\_\_\_\_\_

Topic of the Master's thesis:  
\_\_\_\_\_  
\_\_\_\_\_

Institution's name: \_\_\_\_\_  
Department: \_\_\_\_\_  
Address: \_\_\_\_\_  
\_\_\_\_\_

Internal mentor: \_\_\_\_\_ Signature: \_\_\_\_\_  
Phone: \_\_\_\_\_ Fax: \_\_\_\_\_

Academic supervisor: \_\_\_\_\_ Signature: \_\_\_\_\_

Student's Declaration:

I hereby acknowledge that I am aware of the prerequisites to be met for the assignment of Master's thesis topics under the Examination Regulations of the SciTec Department of the Jena University of Applied Sciences.

Also, I declare that I am not in the process of taking a Master's examination in the same field at any other university or college in the territory to which the German Higher Education Framework Act applies.

Nor is it true that I irrevocably failed a Master's examination in the same subject area at a university or college in the territory to which the German Higher Education Framework Act applies.

I declare that I will observe rules of good scientific practice.

Jena, \_\_\_\_\_ Signature: \_\_\_\_\_  
*Student*

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Approval by the course leader Scientific Instrumentation:

Topic approved and assigned on: \_\_\_\_\_

Thesis to be submitted by: \_\_\_\_\_ Signature: \_\_\_\_\_  
(Approval date + 18 weeks) *Course leader*