



FAKULTÄT FÜR
INFORMATIK

Digital Engineering

Master's Degree Program

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What is Digital Engineering?

Digital Engineering

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Computer Science + Engineering Discipline

⇒ Diverse application scenarios

- Robotics
- Autonomous vehicle
- Smart factory / Smart home
- Intelligent Production
- Website: <http://vierfores2.ovgu.de/digi-eng/index.php/en/>

Study Program Structure

Digital Engineering Structure

- | | |
|-------------------------------------|--|
| | Σ 120CP |
| • Fundamentals of Computer Science: | $\geq 15\text{CP}$ (or $\geq 5\text{CP}^*$) |
| • Fundamentals of Engineering: | $\geq 5\text{CP}$ (or $\geq 15\text{CP}^*$) |
| • Human factors: | $\geq 5\text{CP}$ |
| • Methods of Computer Science: | $\geq 10\text{CP}$ |
| • Methods of Engineering: | $\geq 10\text{CP}$ |
| • Interdisciplinary team project: | 6CP |
| • Specialization: | $\geq 15\text{CP}$ |
| • Digital Engineering project: | 12CP |
| • Master's thesis: | 30CP |

(** dependent on your first study degree*)

Where to Choose Modules from?

Module list: <http://www.inf.ovgu.de/ordnungenma.html>

- Computer Science modules
 - Fundamentals: FIN Bachelor & Master programs
 - Methods of Computer Science: FIN Master programs
- Engineering modules
 - Fundamentals: FEIT/FMB/FVST Bachelor & Master programs
 - Technical Specialization: FEIT/FMB/FVST Master programs
- Human factors
 - Bachelor and Master programs of FHW/FWW

The modules offered in the current term are in the LSF.

DO NOT use LSF to map modules to thematic areas!

First Semester Courses - Example

- For Engineering background
 - Introduction to Computer Science for Engineers
 - Introduction to Software-Engineering for Engineers
 - Introduction to Computational Intelligence for Engineers
 - Introduction to Simulation
 - Algorithm Engineering
 - Database Concepts
 - Human Factors
- Lectures are given at Summer **or** Winter term
 - Distribute them over 1st **and** 2nd semester

Summer Term - Exemplary courses

- Introduction to Computer Science for Engineers (if engineering background)
- Principles and Practices in Scientific Working
- Database Concepts (if engineering background)
- Student Conference
- Distributed Control Systems (if computer science background)
- Process Control (if computer science background)

Choosing modules to PLAN YOUR STUDIES

YOU
choose the courses you want to attend!

Which Engineering Direction?

- Mechanical
- Electrical
- ...
- Chemical
- Medical

Recommendation: Create a Study Plan

Personalized Plan of Studies

1. Find modules
 - ✓ Go through the modules offered, according to the LSF (<https://lsf.ovgu.de/qislsf/rds?state=wtree&search=1&trex=step&root120152=10640|10594|10813|10481&P.vx=kurz>)
 - ✓ Read the module descriptions (web pages) and
 - ✓ Drop by at the first one or two meetings
 - ✓ Make sure you have the background needed to attend the course – ASK the teacher if you are not sure
2. Assign the modules you chose to thematic areas
 - Go through the module catalog
3. Write down your plan
4. **Update your plan** at the end of each semester

Personal Plan of Studies

Thematic Area	Semester	Module	CP
Fundamentals of Computer Science	1	1.
		2.
	2	3.
Methods of Engineering	2	1.
		2.
	3	3.
Human Factors	1	1.
	2	2.
...			

Important Notes on Modules

- Each module is initially **optional** \Rightarrow you are free to choose a module you want (according to the DE master program structure, cf. slide 5)
- After taking the first exam in a module, it becomes **mandatory** \Rightarrow you need to finish this module!
- It is **NOT allowed** to change thematic areas of modules

Examinations

Examinations for Master Students

- Each module must be completed with an exam
- What types of exam are there?
 - Oral examination – *mündliche Prüfung*
 - Written examination – *Klausur*
 - Homework – *Hausarbeit*
- Type of exam depends on module

ASK: Teacher

Examinations for Master Students

- When planning the 1st exam for a course, **BEWARE**
 - NO automatic enrollment – YOU must take action !
 - There are enrollment deadlines; if you miss a deadline, you cannot enroll
 - You can cancel an enrollment until 7 days before exam.
 - **Never register for an examination where you have not attended the lecture!**
- **BEWARE**
 - At most three tries per course.
 - You can have three tries for three courses total.
For all other courses you have two tries.
 - **You have only ONCE the chance to step back from the exam of a course!**

Getting Advice

You can get Advice from

1. Studies Coordinators

- Prof. Frank Ortmeier
Office: G29-404
E-Mail: frank.ortmeier@ovgu.de
 - Prof. Gunter Saake
Office: G29-110
E-Mail: saake@iti.cs.uni-magdeburg.de
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Studies Coordinator Assistants

- Sebastian Nielebock
Office: G29-406
E-Mail: sebastian.nielebock@ovgu.de
- Sebastian Krieter
Office: G29-001
E-Mail: sebastian.krieter@ovgu.de

You can get Advice from

1. Studies Coordinators
2. Coordinator for DE-Projects
 - Dr. Sandro Schulze

Office: G29-109

E-Mail: sandro.schulze@iti.cs.uni-magdeburg.de

Website: [http:](http://www.dbse.ovgu.de/Mitarbeiter/Sandro+Schulze.html)

[//www.dbse.ovgu.de/Mitarbeiter/Sandro+Schulze.html](http://www.dbse.ovgu.de/Mitarbeiter/Sandro+Schulze.html)

You can get Advice from

1. Studies Coordinators
2. Coordinator for DE-Projects
3. International Relationships and Exchange Coordinator
 - Dr. Claudia Krull

Office: G29-214

E-Mail: claudia.krull@ovgu.de

Website: <http://www.inf-international.ovgu.de/>

You can get Advice from

1. Studies Coordinators
2. Coordinator for DE-Projects
3. International Relationships and Exchange Coordinator
4. Examinations Office
 - Website: <http://www.inf.ovgu.de/pamt.html>

You can get Advice from

1. Studies Coordinators
2. Coordinator for DE-Projects
3. International Relationships and Exchange Coordinator
4. Examinations Office
5. FARAFIN Students (E-Mail: post@farafin.de)

Establish contact to FARAFIN!

FARAFIN is the students' board of the FIN.

- They are students
- They are already familiar with the studies here
- They are volunteers who support other students
- They organize several events – from time management courses to come-together parties
- They also have a mentoring program for international

You can get Advice from

1. Studies Coordinators
2. Coordinator for DE-Projects
3. International Relationships and Exchange Coordinator
4. Examinations Office
5. FARAFIN Students
6. Other DigiEng Students

Get Connected to Other DigiEng Students!

They can help you to

1. Make your plan of studies
2. Enroll for examinations
3. Find out whether you can apply for a transfer of ECTS and how
4. Find your way through unfamiliar procedures

You can get Advice from

1. Studies Coordinators
2. Coordinator for DE-Projects
3. International Relationships and Exchange Coordinator
4. Examinations Office
5. FARAFIN Students
6. Other DigiEng Students
7. DigiEng Facebook Group
 - <https://www.facebook.com/groups/223056807855119/>

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4. Examinations Office
5. FARAFIN Students
6. Other DigiEng Students
7. DigiEng Facebook Group
8. Faculty's official page for international students
 - <http://www.inf-international.ovgu.de/>