



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(s)

## → Diverse application scenarios

- Robotics
- Autonomous Vehicles
- ...
- Smart factory/Smart home
- Intelligent Production

Web page: <http://www.digi-eng.ovgu.de/en/>

# Study Program Structure

# Digital Engineering — Structure

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	$\Sigma 120$ CP
• Fundamentals of Computer Science:	$\geq 15$ CP (or $\geq 5$ CP*)
• Fundamentals of Engineering:	$\geq 5$ CP (or $\geq 15$ CP*)
• Human factors:	$\geq 5$ CP
• Methods of Computer Science:	$\geq 10$ CP
• Methods of Engineering:	$\geq 10$ CP
• Interdisciplinary team project:	0 - 6 CP
• Specialization:	$\geq 15$ CP
• Digital Engineering project:	6 - 12 CP
• Master's thesis:	30 CP

(\* dependent on your first study degree)

# Where to Choose Modules from?

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- Module list:
  1. Go to <https://www.inf.ovgu.de/>
  2. Click on *Examination Office*, on the next page click on *Study Regulations*
  3. There you find everything you need (see screenshot next page)
    - Module list
    - Module catalogue
    - even the (most recent) study regulations



### Computer Science

#### Bachelor

- ▶ [Study & examination Regulations](#)
- ▶ [Module catalogue](#)
- ▶ [Module Lists](#)
- ▶ [Internship Regulations](#)
- ▶ [Degree Program Information](#)

#### Master

- ▶ [Study & Examination Regulations](#)
- ▶ [Module Catalogue](#)
- ▶ [Module Lists](#)
- ▶ [Degree Program Information](#)

### Computational Visualistics

#### Bachelor

- ▶ [Study & Examination Regulations](#)
- ▶ [Module Catalogue](#)
- ▶ [Module Lists](#)
- ▶ [Internship Regulations](#)
- ▶ [Degree Program Information](#)

#### Master

- ▶ [Study & Examination Regulations](#)
- ▶ [Module Catalogue](#)
- ▶ [Module Lists](#)
- ▶ [Degree Program Information](#)

### Computer Science Engineering

#### Bachelor

- ▶ [Study & Examination Regulations](#)
- ▶ [Module Catalogue](#)
- ▶ [Module Lists](#)
- ▶ [Internship Regulations](#)
- ▶ [Degree Program Information](#)

#### Master

- ▶ [Study & Examination Regulations](#)
- ▶ [Module Catalogue](#)
- ▶ [Module Lists](#)
- ▶ [Degree Program Information](#)

### Business Computer Science

#### Bachelor

- ▶ [Study & Examination Regulations](#)
- ▶ [Module Catalogue](#)
- ▶ [Module Lists](#)
- ▶ [Internship Regulations](#)
- ▶ [Degree Program Information](#)

#### Master

- ▶ [Study & Examination Regulations](#)
- ▶ [Module Catalogue](#)
- ▶ [Module Lists](#)
- ▶ [Degree Program Information](#)

### Data and Knowledge Engineering

#### Master

- ▶ [Study & Examination Regulations](#)
- ▶ [Module Catalogue](#)
- ▶ [Module Lists](#)
- ▶ [Degree Program Information](#)

### Digital Engineering

#### Master

- ▶ [Study & Examination Regulations](#)
- ▶ [Module Catalogue](#)
- ▶ [Module lists](#)
- ▶ [Degree Program Information](#)

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<https://www.inf.ovgu.de/en/Study/Being+a+student/Examination+Office/Study+Regulations.html>

# Where to Choose Modules from?

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Some general rules for choosing modules

- Computer Science modules
  - Fundamentals: all courses from FIN Bachelor & Master programs
  - Methods of Computer Science: all courses from FIN Master programs
- Engineering modules
  - Fundamentals: all courses from FEIT/FMB/FVST Bachelor & Master programs
  - Technical Specialization: all courses from FEIT/FMB/FVST Master programs
- Human factors
  - all courses of 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

**COMPULSORY**

- For Engineering background
  - Introduction to Computer Science for Engineers
  - Introduction to Software-Engineering for Engineers
  - Introduction to Simulation
  - Algorithm Engineering
  - Database Concepts
- Lectures are given at Summer or Winter term → Distribute them over 1<sup>st</sup> and 2<sup>nd</sup> semester

# Summer Term — Exemplary Courses

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- Introduction to Software Engineering for Engineers (if engineering background)
- Principles and Practices in Scientific Working
- Database Concepts (if engineering background)
- Seminar (Student Conference, Predictive Maintenance, ...)
- Nonlinear Control (if computer science background)
- Introduction to Distributed Sensor Data Fusion

# Winter Term — Exemplary Courses

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- Introduction to Computer Science for Engineers (if engineering background)
- Introduction to Simulation
- Electronic Circuits (if computer science background, ask teacher)
- Systems & Control (if computer science background, ask teacher)
- Estimation for Autonomous Mobile Robots

Choosing Modules to

PLAN YOUR STUDIES

# YOU

choose the courses you want to attend!

## Which Engineering Direction?

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

# Recommendation: Create a Study Plan

## Personalized Plan of Studies

### 1. Find modules:

- Review modules offered according to the LSF  
<https://lsf.ovgu.de/qislsf/rds?state=wtree&search=1&trex=step&root120231=21636%7C21929%7C21800%7C21669&P.vx=kurz>
- read module descriptions (web pages) AND
- drop by at the first one or two meetings (if no limits)
- Make sure you have the background needed to attend the course – ASK the teacher if you are not sure

### 2. Assign modules you choose to thematic areas

- Go through the module catalog/module list

# Recommendation: Create a Study Plan (cont'd)

## Personalized Plan of Studies

3. Write down your plan

4. Update your plan at the end of each semester!

- What do you have accomplished?
- additional courses?
- something skipped?
- It's all fine to skip courses, but you should keep track of what you got ;)

# Personal Plan of Studies

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<b>Thematic Area</b>	<b>Semester</b>	<b>Module</b>	<b>CP</b>
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

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- 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!
- Decisions on thematic areas of modules are done when registering for the exam
- Do not place modules in *Additional Achievements (zusätzliche Leistungen)*  $\Rightarrow$  *credits won't count...never ever!*

Examinations

# Examinations for Master Students

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- 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 (cont'd)

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- 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

The ultimate landing page with lots of information goes here...

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

The screenshot shows the website for the Faculty of Computer Science at Otto von Guericke University Magdeburg. The header includes the university logo, the faculty name, and navigation links for Accessibility, Sitemap, Imprint, and Contact. A search bar is present with the text 'Search phrase' and a magnifying glass icon. Below the header is a dark navigation bar with 'THE FACULTY | RESEARCH | INTERNATIONAL | EXAMINATION OFFICE' and 'DIREKTLINKS'. A secondary navigation bar contains 'Home', 'Study', 'Being a student', 'Incoming', 'Bachelor Courses', 'Master Courses', 'Outgoing', 'FAQ\_new', and 'OVGU Offices'. The main content area is divided into several sections: 'Incoming students' with a 'NEW STUDENTS' button; 'Bachelor Courses' with a list of four programs; 'Master Courses' with a list of six programs; 'FaRaFIN' with a logo and description; 'Outgoing' with an 'OUTGOING STUDENTS' button; 'Frequently Asked Questions' with a 'FAQ' button; and 'Get Assisted by Officials' with a 'GET ASSISTED BY STAFF' button. On the right side, there is a vertical stack of blue buttons: 'EXAM OFFICE', 'STUDY DOCS', 'COURSE VIDEOS', 'STUDY SUPPORT', 'MENTORS', and 'ACADEMIC CLUB'. The footer contains the text 'Last Modification: 27.09.2019 - Contact Person: Webmaster' and a 'Privacy Policy pursuant to the GDPR' link.

OTTO VON GUERICKE  
UNIVERSITÄT  
MAGDEBURG

FACULTY OF  
COMPUTER SCIENCE

Accessibility | Sitemap | Imprint | Contact

Search phrase

THE FACULTY | RESEARCH | INTERNATIONAL | EXAMINATION OFFICE DIREKTLINKS

Home Study Being a student Incoming | Bachelor Courses | Master Courses | Outgoing | FAQ\_new | OVGU Offices

Incoming students

**NEW STUDENTS**

Bachelor Courses

- ▶ [Bachelor Business Informatics](#)
- ▶ [Bachelor Computer Science](#)
- ▶ [Bachelor Computer Systems in Engineering](#)
- ▶ [Bachelor Computational Visualistics](#)

Master Courses

- ▶ [Master Business Informatics](#)
- ▶ [Master Computer Science](#)
- ▶ [Master Computer Systems in Engineering](#)
- ▶ [Master Computational Visualistics](#)
- ▶ [Master Digital Engineering](#)
- ▶ [Master of Data and Knowledge Engineering](#)

FaRaFIN

**farafin**

Fachschaftsforum der Fakultät für Informatik der Otto-von-Guericke-Universität Magdeburg

The elected students  
representative's body of FIN, OVGU.

Outgoing

**OUTGOING  
STUDENTS**

Frequently Asked Questions

**? FAQ**

Get Assisted by Officials

**GET  
ASSISTED  
BY  
STAFF**

**EXAM OFFICE**

**STUDY DOCS**

**COURSE VIDEOS**

**STUDY SUPPORT**

**MENTORS**

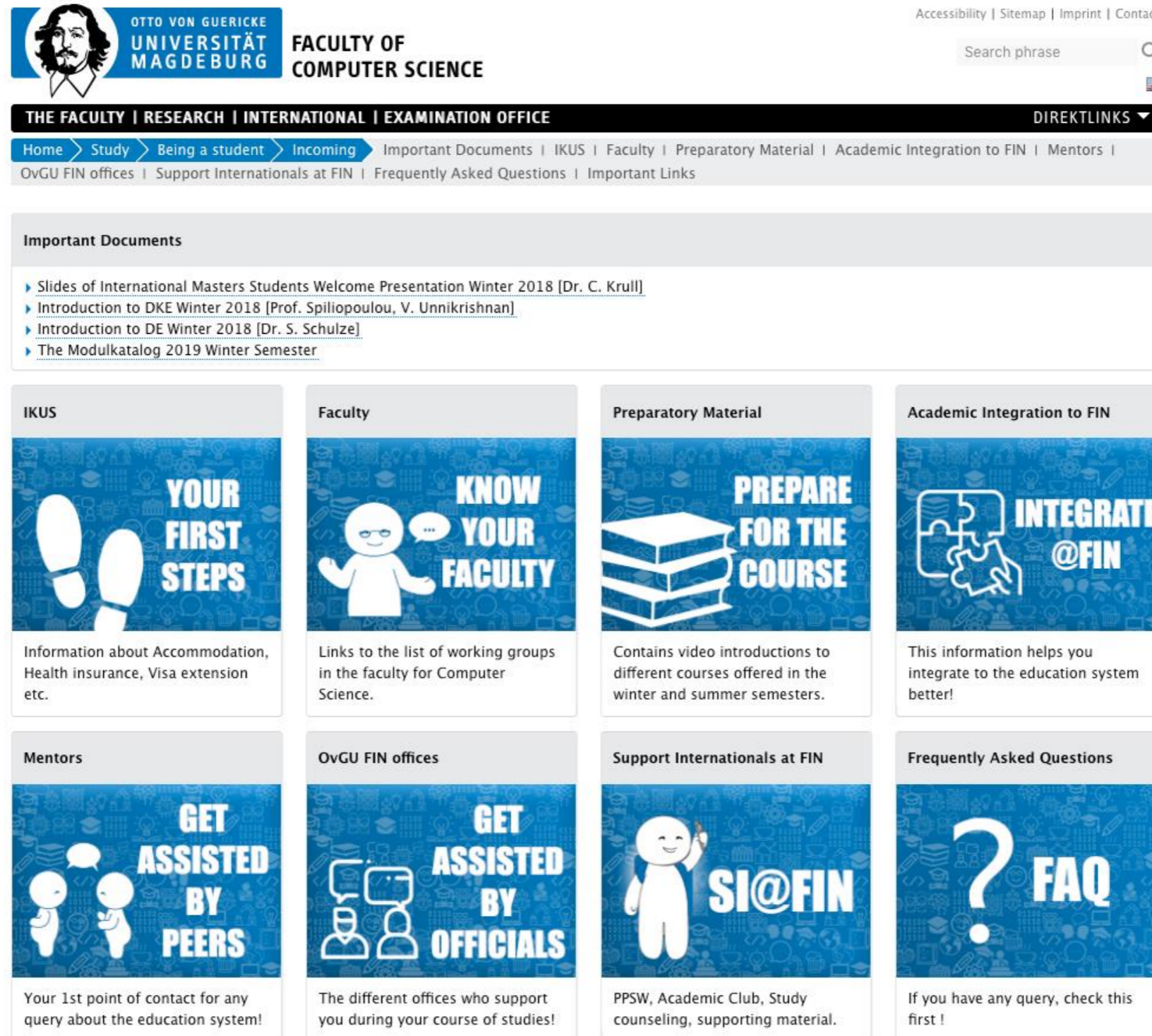
**ACADEMIC CLUB**

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# Even more (specific) information for Incoming Students

<https://www.inf.ovgu.de/inf/en/Study/Being+a+student/Incoming-p-5070.html>



The screenshot shows the website for the Faculty of Computer Science at Otto von Guericke University Magdeburg. The header includes the university logo and name, a search bar, and navigation links for Accessibility, Sitemap, Imprint, and Contact. A main navigation bar lists categories like THE FACULTY, RESEARCH, INTERNATIONAL, and EXAMINATION OFFICE. A secondary navigation bar provides links to Home, Study, Being a student, Incoming, and various document and support pages. The main content area is titled 'Important Documents' and lists several presentations and introductions. Below this is a grid of eight informational cards, each with a title, icon, and brief description.

**OTTO VON GUERICKE UNIVERSITÄT MAGDEBURG FACULTY OF COMPUTER SCIENCE**

Accessibility | Sitemap | Imprint | Contact









Search phrase

THE FACULTY | RESEARCH | INTERNATIONAL | EXAMINATION OFFICE DIREKTLINKS

Home > Study > Being a student > Incoming Important Documents | IKUS | Faculty | Preparatory Material | Academic Integration to FIN | Mentors | OvGU FIN offices | Support Internationals at FIN | Frequently Asked Questions | Important Links

### Important Documents

- ▶ [Slides of International Masters Students Welcome Presentation Winter 2018 \[Dr. C. Krull\]](#)
- ▶ [Introduction to DKE Winter 2018 \[Prof. Spiliopoulou, V. Unnikrishnan\]](#)
- ▶ [Introduction to DE Winter 2018 \[Dr. S. Schulze\]](#)
- ▶ [The Modulkatalog 2019 Winter Semester](#)

<b>IKUS</b>  <b>YOUR FIRST STEPS</b> Information about Accommodation, Health insurance, Visa extension etc.	<b>Faculty</b>  <b>KNOW YOUR FACULTY</b> Links to the list of working groups in the faculty for Computer Science.	<b>Preparatory Material</b>  <b>PREPARE FOR THE COURSE</b> Contains video introductions to different courses offered in the winter and summer semesters.	<b>Academic Integration to FIN</b>  <b>INTEGRATE @FIN</b> This information helps you integrate to the education system better!
<b>Mentors</b>  <b>GET ASSISTED BY PEERS</b> Your 1st point of contact for any query about the education system!	<b>OvGU FIN offices</b>  <b>GET ASSISTED BY OFFICIALS</b> The different offices who support you during your course of studies!	<b>Support Internationals at FIN</b>  <b>SI@FIN</b> PPSW, Academic Club, Study counseling, supporting material.	<b>Frequently Asked Questions</b>  <b>FAQ</b> If you have any query, check this first !



# You can get Advice from...

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## 1. Studies Coordinators

- Prof. Benjamin Noack

Office: G28-001

E-Mail: [benjamin.noack@ovgu.de](mailto:benjamin.noack@ovgu.de)



- Prof. Gunter Saake

Office: G29-110

E-Mail: [saake@iti.cs.uni-magdeburg.de](mailto:saake@iti.cs.uni-magdeburg.de)





# You can get Advice from...

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1. Studies Coordinators

2. Coordinator for DE projects

- NN

3. International Relationships and Exchange Coordinator

- Dr. Claudia Krull

Office: G29-214

E-Mail: [claudia.krull@ovgu.de](mailto:claudia.krull@ovgu.de)

# You can get Advice from...

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1. Studies Coordinators

2. Coordinator for DE projects

3. International Relationships and Exchange Coordinator

4. Examination Office

Office: FIN building, room 101/102

Web: <http://www.inf.ovgu.de/pamt.html>

5. FaRaFIN

Email: [post@farafin.de](mailto:post@farafin.de)

Web: [www.farafin.de](http://www.farafin.de)

# You can get Advice from...

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1. Studies Coordinators
2. Coordinator for DE projects
3. International Relationships and Exchange Coordinator
4. Examination Office
5. FaRaFIN
6. Other DigiEng students/Mentors
7. DigiEng Facebook Group  
<https://www.facebook.com/groups/223056807855119/>
8. Moodle Group:  
<https://elearning.ovgu.de/course/view.php?id=14567>