



# 2012 ET-QUICK-START GUIDE v.2



BALL LIGHTNING  
2012



## Contents

A short welcome	3
About the Fachschaft	4
The E-Labor	5
Computing Lab	6
Wi-Fi & Internet	6
Important numbers & addresses	7
Map of Paderborn	8
Degree plan: Signal & Information Processing	10
Degree plan: Electronics & Devices	11
Course List	12
Food at the uni	13
A few impressions	14
Author's Scrapbook, various Information	15
Campus map	16

## Impressum

Herausgeber: Fachschaft Elektrotechnik und Informationstechnik  
 Universität Paderborn  
 Warburger Straße 100  
 33098 Paderborn

Kontakt: Tel.: 60-3051  
 E-Mail: fset@upb.de  
 Raum P1.5.16.1

Redaktion: Brian Butterly

Layout: Brian Butterly

V.i.S.d.P: Brian Butterly

Auflage: 30 Stück

## Author's scrapbook

### Library

<http://ub.upb.de>  
 -large selection of literature  
 -printed books and ebooks  
 -missing books can be ordered

### MSDNAA/MS Licences

<https://msdnaa.uni-paderborn.de/>  
 -licences for various MS software  
 -"free" Windows copies

### Bicycle Workshop

<http://asta.uni-paderborn.de/service/fahrradwerkstatt/>  
 -repair you own bike

### PAUL

<http://paul.upb.de>  
 -timetables  
 -registration for exams  
 -problems? -> paul@upb.de

### Service Center

opposite of library  
 -problems with study course

### VPN

<http://imt.uni-paderborn.de/netzbetrieb/vpn-installieren/>  
 -gives you uni IP at home  
 -access to library services from home  
 -access to selected uni PCs from home

wise 2012

digital copy



## Faculty's BBQ



Comfortable evening  
in the Fachschaft



Our last party



© M. Krumme



## Welcome,

to start off, I'd like to welcome you all to the University of Paderborn and wish you all the best for your studies in the name of the Fachschaft Elektrotechnik (FSET).

So, who are we, to wish you welcome here? Well, we're the „Fachschaftsrat“, a committee voted by all students from our area in uni, and the „Aktive“, all students helping the voted committee do their work. We represent all of you on various boards concerning everything from expenses to study regulations. We also offer you a stack of services which will be described on the following pages.

Fyi, I guess you've made quite a good choice coming to Paderborn. Due to only having just over 500 students in the area of electronics, the ratio between professors and students and the size of classes are just great. This results in the fact, that you'll always find somebody to answer you a question, if it's not the professor himself/herself, it will be a member of their staff. Most professors will actually offer you to come round their office when you've got any questions. You should really make use of this offer!

This flyer should tell you everything you need for a good start. If you've got any other questions or need a tour across campus, simply visit our office (P1.5.16.1)!

Brian Butterly

chairman FSET

copy



## The Fachschaft

What's the „Fachschaft“? There actually are two answers to this question. The first one simply is „You!“. „Fachschaft“ describes all the students of one area or department. So you are part of the „Fachschaft“!

The other answer is, if you'd try to describe it in english, a „students union“. This union consists of a stack of students using up their free time to help others with problems and questions, take seats in university's committees and try to make a student's life as easy and comfortable as possible, at least the part around classes. Being a kind of a union we also represent you towards your professors, if you ever have a problem you can't solve yourself.

The Fachschafts office is in P1.5.16.1. Here they offer you a quiet place to relax, an electrifying place for learning and, last but not least, a loud place to leave work behind you. Above that, they offer the best coffee on campus, a few chilled drinks and some sugar, or rather sweets and chocolate.

If you ever need to find somebody to talk to, or the answer to a question, feel free to come in!

In the Fachschaft's office one can also get questions from old exams and tests, which might sometimes ease up the learning phase.

P.S.

**You're always welcome!** At any time of the day!



## Food

### Mensa

The Mensa is our main canteen. It offers three core main courses per day (vegetarian, non-vegetarian, soup). You'll be able to have a look at the menu for each week on sundays. You can also choose various salads, noodles or courses from the BBQ-counter. For afters you've got the choice between different puddings and curd.

### Gownsmen's Pub

Different main courses every lunchtime and a menu after 19hrs offer a good alternative to Mensa. In during summer you can also buy fresh „Bratwürstchen“ from the hut outside.

### Caféte

In the Caféte you can get different rolls and small snacks for inbetween. Around lunchtime you've got the choice between burgers, chips, sausages and Schnitzel.

### Wok'n Roll

Here you can get Chinese noodles with different extras.

### One Way Snacks

Simply sandwiches, wraps, salads and waffles!

digital copy

Check out  
<http://www.studentenwerk-pb.de/gastronomie.html>  
for menus and opening hours



## Course list

### Compulsory subjects:

*Module: Introduction to ESE I*

Advanced System Theory

Modeling & Simulation

*Module: Management and Applications*

Management of Technical Projects

Topics in Systems Engineering

### Compulsory electives:

*Module: Introduction to ESE II*

Introduction to Algorithms

Digital Signal Processing

High-Frequency Engineering

Mechatronics & Electrical Drives

Software Engineering

### Compulsory optional subjects:

*Module: Introduction to Signal & Information Processing*

Statistical Signal Processing

Statistical Learning & Pattern Recognition

*Module: Introduction to Electronics & Devices*

Fields & Waves

Circuit & System Design

For up to date information, please refer to  
<http://ei.uni-paderborn.de/english/education/curriculum.html>



## The E-Labor

The E-Labor is a small, student run lab offering you various tools and bits.

If you ever want to do some practical work such as etching or soldering, the guys there will give you a hand.

Currently having 4 workplaces, you've got access to a wide variety of measuring equipment, and everything you need to create, build, repair and test electronic devices. Two computers with everything necessary installed for creating your own PCBs are available here.

If you need any small parts, simply come round and give it a try. The E-Labor has quite a large selection of Resistors, Capacitors, Transistors, various chips etc.

The staff also offers a regular ordering at [www.reichelt.de](http://www.reichelt.de), which is quite a large store selling various ET and IT bits.

You can contact the staff, Jan Müller and Lars Vössing by mail, [fset-elabor@et.upb.de](mailto:fset-elabor@et.upb.de) or personally in P1.5.16.2.

digital copy



## Computing Lab

Every student from the area of electronic engineering has the option to use our computing lab in P7.2.02.1. Offering 22 PCs Debian Linux, you've got access to software such as Maple and Matlab. You can use the room for any kind of work and learning.

To logon, you only need to activate the login for you IMT Account:

1. Goto <http://benuterverwaltung.upb.de> and login
2. Klick onto „Decentralized Services“
3. Klick the Button next to „Rechnerzugang im Institut für Informatik“ and request access.

To be able to access the lab, you need a access card. This card can be picked up in E1.129.

## Wi-Fi & Internet

University has a Wi-Fi coverage of probably 100% of the campus. The easiest way to access the net, is by using „eduroam“. You'll need a certificate, which you can get in <http://benuterverwaltung.upb.de> -> WLAN. Also check out <http://imt.uni-paderborn.de/netzbetrieb/wlan/netzwerk-eduroam/> . I know it's german, simply choose an OS and follow the pictures.....



## Degree Plan: Electronics & Devices

MS Electrical Systems Engineering Specialization: Electronics & Devices			
1. Semester 20 SWS, 30 CP	2. Semester 20 SWS, 30 CP	3. Semester 20 SWS, 30 CP	4. Semester 30 CP
Introduction to ESE 1 <i>Compulsory subject</i> Advanced System Theory (4 SWS, 6 CP)	Intro. to Electronics & Devices <i>Compulsory subject E&amp;D</i> Circuit & System Design (4 SWS, 6 CP)	Electronics & Devices <i>Compulsory elective</i> (4 SWS, 6 CP)	Master Thesis (30 CP)
Introduction to ESE 1 <i>Compulsory subject</i> Modeling & Simulation (4 SWS, 6 CP)	Electronics & Devices <i>Compulsory elective</i> (4 SWS, 6 CP)	Electrical Systems Engineering <i>Elective</i> (4 SWS, 6 CP)	
Intro. to Electronics & Devices <i>Compulsory subject E&amp;D</i> Fields & Waves (4 SWS, 6 CP)	Introduction to ESE 2 <i>Compulsory elective</i> (4 SWS, 6 CP)	Electrical Systems Engineering <i>Elective</i> (4 SWS, 6 CP)	
Introduction to ESE 2 <i>Compulsory elective</i> (4 SWS, 6 CP)			
Management and Application <i>Compulsory subject</i> Management of Technical Projects (2 SWS, 3 CP)	Projects <i>Elective</i> Analysis/ Design (6 SWS, 9 CP)	Projects <i>Elective</i> Realization/ Test (6 SWS, 9 CP)	
General Studies <i>Elective</i> Language Course German or other (2 SWS, 3 CP)	General Studies <i>Elective</i> Language Course German or other (2 SWS, 3 CP)	Management and Application <i>Compulsory seminar</i> Topics in Systems Engineering (2 SWS, 3 CP)	
Abbreviations: SWS: Hours per week CP: ECTS credits			

## Compulsory electives

### Summer semester

Analog CMOS IC's  
Controlled AC Drives  
Optical Communication B  
Optical Communication D  
Power Electronics  
Processing of Semiconductors  
Sensor Technology

### Winter semester

High-Frequency Electronics  
Micro-Electromechanical Systems  
Optical Communication C  
Radio Frequency Power Amplifiers  
System Packing  
VLSI Testing

### Summer and winter semester

Optical Communication A

digital



## Degree Plan: Signal & Information Processing

MS Electrical Systems Engineering Specialization: Signal & Information Processing			
1. Semester 20 SWS, 30 CP	2. Semester 20 SWS, 30 CP	3. Semester 20 SWS, 30 CP	4. Semester 30 CP
Introduction to ESE 1 <i>Compulsory subject</i> <b>Advanced System Theory</b> (4 SWS, 6 CP)	Intro. to Signal & Info. Processing <i>Compulsory subject S&amp;IP</i> <b>Statistical Learning &amp; Pattern Recognition</b> (4 SWS, 6 CP)	Signal & Information Processing <i>Compulsory elective</i> (4 SWS, 6 CP)	<b>Master Thesis</b> (30 CP)
Introduction to ESE 1 <i>Compulsory subject</i> <b>Modeling &amp; Simulation</b> (4 SWS, 6 CP)	Signal & Information Processing <i>Compulsory elective</i> (4 SWS, 6 CP)	Electrical Systems Engineering <i>Elective</i> (4 SWS, 6 CP)	
Intro. to Signal & Info. Processing <i>Compulsory subject S&amp;IP</i> <b>Statistical Signals</b> (4 SWS, 6 CP)	Introduction to ESE 2 <i>Compulsory elective</i> (4 SWS, 6 CP)	Electrical Systems Engineering <i>Elective</i> (4 SWS, 6 CP)	
Introduction to ESE 2 <i>Compulsory elective</i> (4 SWS, 6 CP)			
Management and Application <i>Compulsory subject</i> <b>Management of Technical Projects</b> (2 SWS, 3 CP)	Projects <i>Elective</i> <b>Analysis/ Design</b> (6 SWS, 9 CP)	Projects <i>Elective</i> <b>Realization/ Test</b> (6 SWS, 9 CP)	
General studies <i>Elective</i> <b>Language Course German or other</b> (2 SWS, 3 CP)	General studies <i>Elective</i> <b>Language Course German or other</b> (2 SWS, 3 CP)	Management and Application <i>Compulsory seminar</i> <b>Topics in Systems Engineering</b> (2 SWS, 3 CP)	
Abbreviations: SWS: Hours per week CP: ECTS credits			

### Compulsory electives

#### Summer semester

Cognitive Systems in Virtual Reality - Modeling and Simulation  
Digital Image Processing II  
Knowledge Engineering  
Robotics  
Topics in Signal Processing

#### Winter semester

Advanced Topics in Robotics  
Digital Image Processing I  
Optimal and Adaptive Filters  
Signal Processing for Wireless Communications  
Wireless Communications

#### Summer and winter semester

Algorithms and Tools for Test and Diagnosis of Systems on a Chip  
Cognitive Systems Engineering - Special Topics  
Rescue Robot Systems  
Simulation of Electromagnetic Fields



## Important numbers and addresses

All numbers are internal numbers, so you'll have to add 05251 60  
( 05251 60 xxxx )

Exams Office Schaefer, Svenja -3427 C2-315  
schaefer-s@zv.upb.de

Student Advisory Service -3202 P1.3.12  
studienberatung@ei.upb.de  
<http://www.studiet.de>

International Office <http://w3cs.uni-paderborn.de/aaa/index.html>

University Sports <http://unisport.upb.de>

Library <http://ub.upb.de>

AStA -3174 ME U 210  
schreibkraft@asta.upb.de  
<http://asta.upb.de>

Fachschaft -3053 P1.5.16.1  
fset@upb.de  
<http://fset.upb.de>