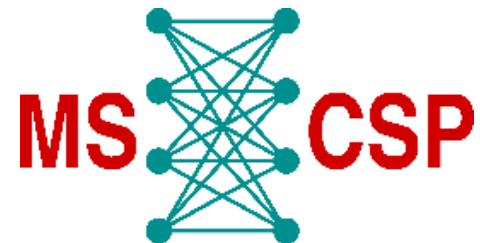

Preparing for a Global Career in Communications and Signal Processing

Martin Haardt



Technische Universität Ilmenau
Communications Research Laboratory
98684 Ilmenau, Germany

E-Mail: Martin.Haardt@tu-ilmenau.de



Homepage: www.tu-ilmenau.de/ei-ms-csp

Outline

- ❑ Master of Science in Communications and Signal Processing (MSCSP)
- ❑ MSCSP Program structure
- ❑ Lecture schedule & Guidelines
- ❑ Summary of regulations
- ❑ Additional information



Outline

- ❑ Master of Science in Communications and Signal Processing (MSCSP)
- ❑ MSCSP Program structure
- ❑ Lecture schedule & Guidelines
- ❑ Summary of regulations
- ❑ Additional information



Master of Science in Communications and Signal Processing

□ International Graduate Program at TU Ilmenau

- ⇒ started in 2009
- ⇒ all lectures, tutorials, and research tasks are in English
- ⇒ sponsored by the German government (currently no tuition fees)
- ⇒ successful 2-year program (4 semesters) since 2009
- ⇒ strong focus on cutting-edge **research**
 - research projects (2-nd and 3-rd semesters)
 - Master thesis (4-th semester)
 - students are encouraged to
 - report their work at leading international conferences and
 - publish in highest impact journals.

□ Excellent preparation for

- ⇒ leading doctoral programs
- ⇒ research and development positions in international companies

Master of Science in Communications and Signal Processing

- ❑ Suitable for good **Bachelors of Science** in
 - ⇒ electrical engineering
 - ⇒ communications engineering
 - ⇒ information technology
 - ⇒ media technology
 - ⇒ computer engineering
 - ⇒ biomedical engineering
 - ⇒ mathematics, physics, and related areas

- ❑ **Starts in October** (every winter semester)

Focus of the MSCSP Program

- ❑ **Communications**

- ⇒ including physical layer concepts, protocols, and applications

- ❑ **Signal processing** (the science behind our digital life)

- ⇒ branch of electrical engineering

- that pulls meaning from the broad sources of data all around us

- ⇒ is at the heart of our modern world

- ❑ **Fundamental concepts**, e.g.,

- ⇒ information theory, coding, modulation, (convex) optimization techniques, compressed sensing, tensor-based signal processing, machine learning, parameter estimation, array signal processing, adaptive filters

- ❑ **Many applications** that lead to **rewarding career opportunities**, e.g.,

- ⇒ future wireless systems, channel modeling, antenna design, connected / autonomous vehicles, radar / sonar, wearable technologies, audio coding, hearing aids, multimedia systems, modern entertainment, biomedical signal processing, brain / computer interfaces, better and safer medical scans, biometric security, big data, stock valuation and prediction

Preparing for a Global Career in Communications and Signal Processing

□ TU Ilmenau

- ⇒ strives to maintain its international reputation for quality in teaching and research and
- ⇒ to provide students with an excellent education.

□ The international students at our university are among the best in the areas of communications and signal processing.

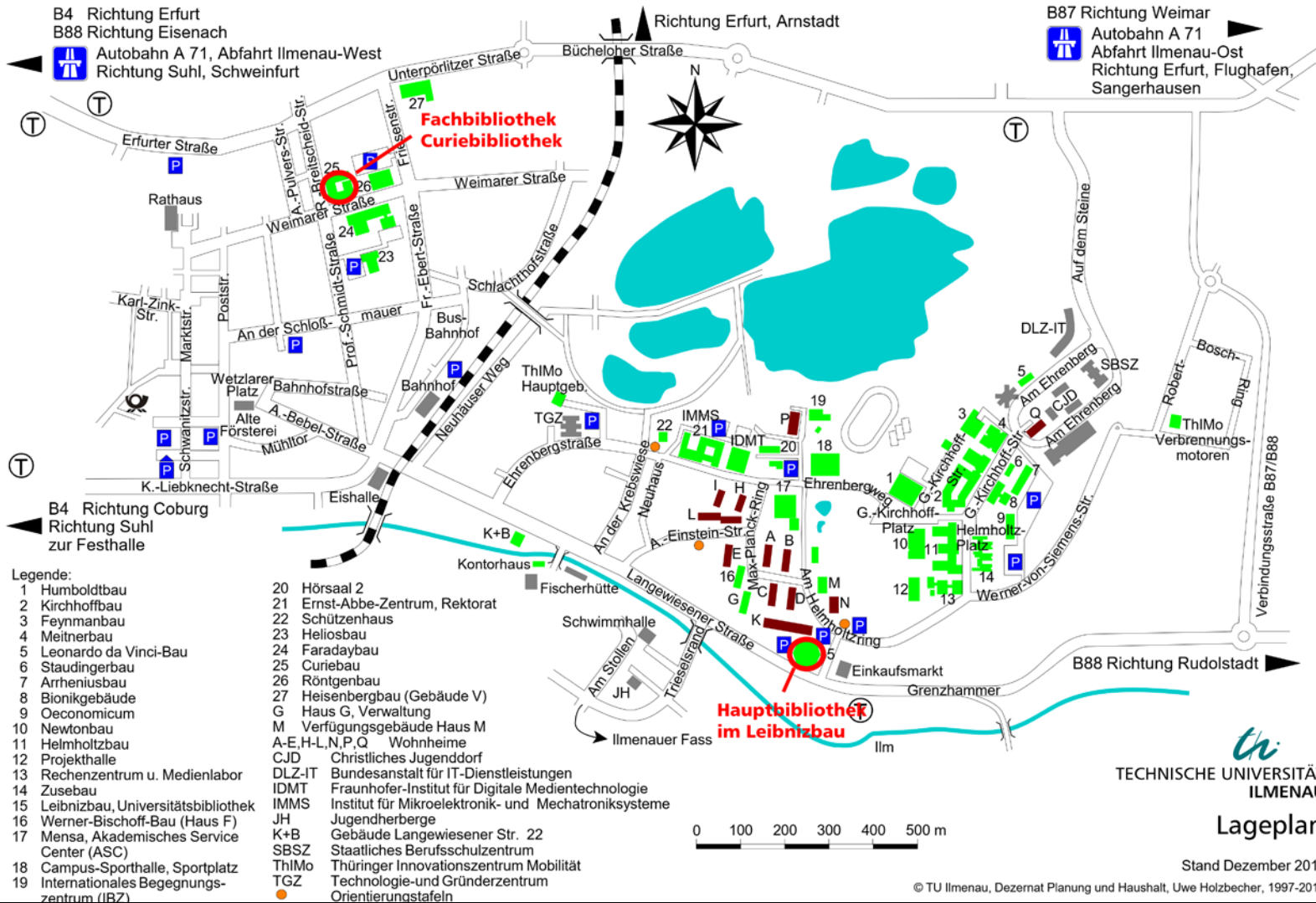
□ As an **MSCSP student** at TU Ilmenau, you have many options.

- ⇒ We not only offer a top-notch disciplinary education,
- ⇒ but also promote community-building activities beyond everyday student life.

□ Our **MSCSP alumni**

- ⇒ their capabilities and careers
 - important indication of the quality of the MSCSP program
- ⇒ form an important part of our international network
- ⇒ act as world-wide ambassadors of the MSCSP program
 - potential international research and project partners
 - help to recruit capable applicants (e.g., in their home countries)

Campus Map



TU Ilmenau Campus



TU Ilmenau Campus



Self-introduction

- ❑ Personal background (country, education, ...)?
- ❑ Your Reasons to choose the MSCSP program?
- ❑ Reasons to choose Ilmenau?
- ❑ Personal interests?
- ❑ Research interests?
- ❑ Future plans?

Outline

- ❑ Master of Science in Communications and Signal Processing (MSCSP)
- ❑ MSCSP Program structure
- ❑ Lecture schedule & Guidelines
- ❑ Summary of regulations
- ❑ Additional information



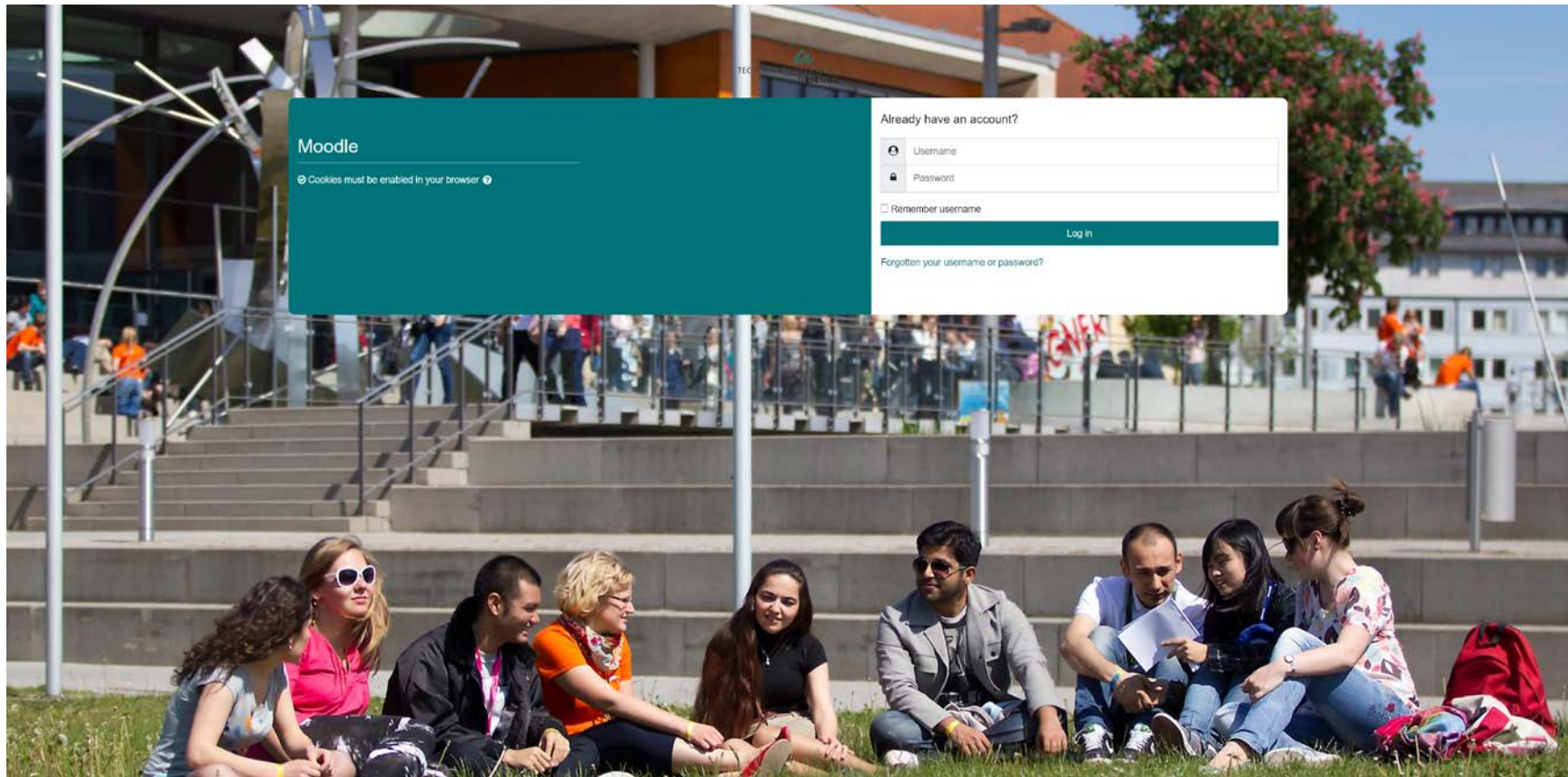
Restrictions due to Corona situation

- ❑ If you have entered from a **risk area** in the last 14 days , you must stay in quarantine in your room for 14 days.
- ❑ Wherever possible and reasonable, a **minimum distance** of **1.50 m** must be maintained in the lecture rooms and halls between all students.
- ❑ It is **highly recommended to wear masks** inside buildings and lecture rooms
 - ⇒ The mouth and nose protection is to be worn until you reach your allocated place in the lecture room.
- ❑ The **summer semester 2020** and the **winter semester 2020/2021** are regarded as a special study period
 - ⇒ Results of the whole semester can be cancelled (for failed exams).
- ❑ There is no a period for Repetition Exams, instead there will be long examination period from **08 February** to **31 March**.

Learning Management System

- ❑ All online courses offered via Moodle

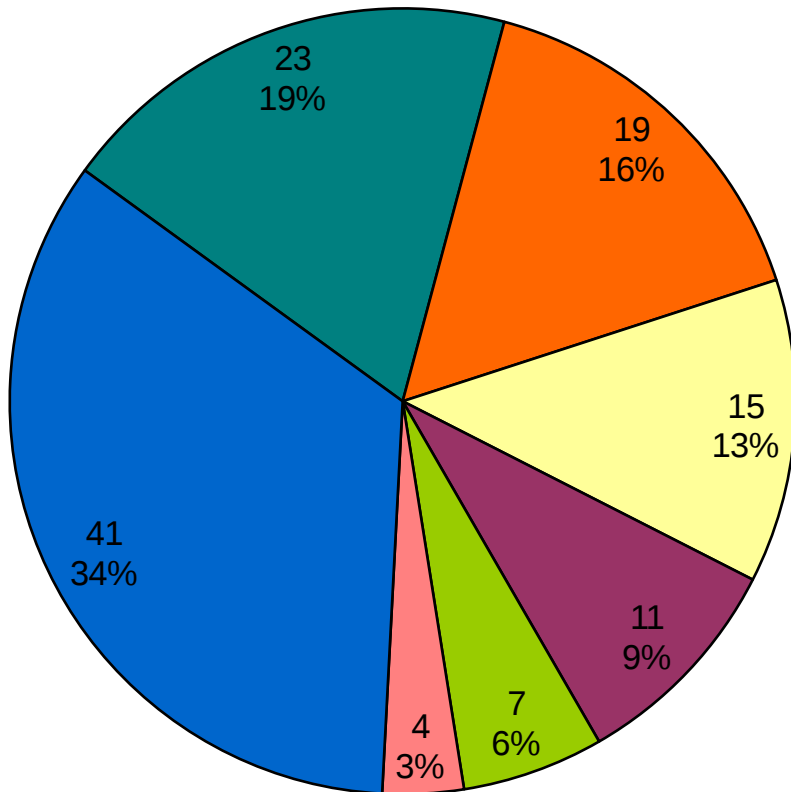
⇒ <https://moodle2.tu-ilmenau.de/login/index.php>



Focus of studies

Distribution of credit points (CPs)

(1. – 4. Semester)



- Computer Science and communication systems
- Communication engineering
- Signal processing
- High frequency- and measurement engineering
- Media technologies
- Non-technical courses
- Research projects & Thesis

Courses

1. Semester		2. Semester		3. Semester	
	CP		CP		CP
Advanced Digital Signal Processing	7	Advanced Mobile Communication Networks	5	Cellular Communication Systems	6
Information Theory and Coding	5	Multimedia Standards	3	Audio Coding	4
Microwave Engineering	4	Non-technical course(s)	5	Advanced topics in Communications and Signal Proc.	3
Communication Networks	8	Mobile Communications	8	Measurements in Communications	3
Communications Engineering	6	Antenna Engineering	4	Adaptive and Array Signal Processing	8
		Research Project	5	Advanced Research Project	6

Research projects

in the 2nd Semester (5 CP) and 3rd Semester (6 CP)

❑ Scientific work

- ⇒ Apply the knowledge from lectures to current research topics
- ⇒ Study and extract knowledge from scientific papers
- ⇒ Also interdisciplinary projects possible
- ⇒ Based on studies of recent publications
- ⇒ Where appropriate, practical work in labs

❑ Research oriented

- ❑ Team work
- ❑ Learn to use modern engineering tools, such as Matlab, Python, NS3, ADS etc.
- ❑ Present research results to class and learn how to write scientific reports and papers

Research projects

□ Project presentations

- ⇒ Introduction of the topic (**lab internal**), within the first 3 weeks
- ⇒ Intermediate presentation (**lab internal**), in the middle of the lecture period
- ⇒ Final presentation, (**8 + 7 min.** in front of the class and other interested audience), after the lecture period (will be scheduled with the other exams)
 - Slides for final presentation must be submitted via email
- ⇒ Excellent presentation on “**How To Give a Talk**” has been linked from the MSCSP web page

[TK10] Tamara G. Kolda, Ph.D. "[How to Give a Talk: Advice on Preparing and Presenting Technical Talks in the Mathematical Sciences](#)"

Research projects

- ❑ **Grading** of the presentations and the papers:
 - ⇒ Presentation structure and understanding of the material
 - ⇒ Contents and level of the presented research
 - ⇒ Answers to questions
 - ⇒ Simulation results
 - ⇒ Slides and didactical preparation
- ❑ **Final results** in form of a conference paper.
 - ⇒ 3 - 6 pages: research project (2nd semester)
 - ⇒ 4 - 8 pages: advanced research project (3rd semester)
- ❑ **The LaTeX template** is available on the MSCSP web page
 - » Academics » Courses » Research Project

Report for the Research Project

Title of your paper

Author 1, Author 2, and Author 3
XYZ Laboratory
Ilmenau University of Technology
P. O. Box 100565, D-98684 Ilmenau, Germany
Email: { email1, email2, email3 }@tu-ilmenau.de

Advisor: *Prof. Smith*
Research Assistant: *M. Sc. Mike Slackenrny*

Abstract — Your abstract should briefly summarize your work in one to two paragraphs. Usually, abstracts are expected to be around 750 characters. Please note that the abstract is the most important part of your paper: Most people read the title, some people the abstract, and only very few the main body. Therefore the abstract should convey the problem addressed and the main novelties of the paper in a few, accessible sentences. Avoid abbreviations as well as citations in the abstract.

Index Terms—Keyword 1, Keyword 2

I. INTRODUCTION

Your introduction motivates the problem again, emphasizing why it is important and what are the practical applications. Use references wherever possible to support your points. The introduction also introduces the state of the art, citing journal papers [4], conference papers [2], books [3], standards, RFCs, and other references. The use of BibTeX to organize your references is strongly encouraged. Try to avoid using websites as sources since these may change over time.

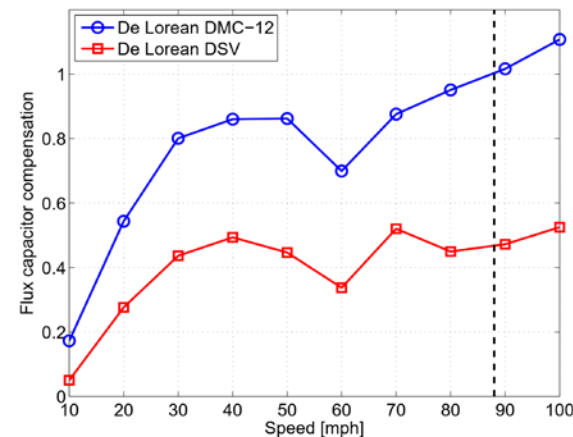


Fig. 1. Obtained flux capacitance vs. speed of the vehicle comparing a DSV with the DMT-12. The DMT-12 is expected to reach critical capacitance at about 88 mph.

Master thesis

In the 4th Semester (30 CP)

- ❑ **Guided scientific work**
 - ⇒ on current research topics
- ❑ **3 presentations** during the preparation (colloquia)
 - ⇒ Introduction of the topic
 - ⇒ Intermediate presentation
 - ⇒ Final presentation
- ❑ **The publication** of the research results (at international conferences or in journals) is encouraged
- ❑ **Cooperation** with industry and research institutes in Germany or abroad is possible
- ❑ **LaTeX templates** are available on the MSCSP web page
 - » FAQ » Students » Templates for the Master's thesis

Non-Technical Courses

□ Language courses

⇒ <https://www.tu-ilmenau.de/sprachen/>



The screenshot shows the website of the ZIB (Zentralinstitut für Bildung) at TU Ilmenau, specifically the 'Sprachen' (Languages) section. The header features the ZIB logo and a large photo of the university building. A sidebar on the left lists navigation options: Startseite, Veranstaltungen, Fachausschüsse, Sprachangebot, Raster zur Selbstbeurteilung, and Kontakt. The main content area is titled 'Sprachen' and contains 'Allgemeine Information' about language courses, including a link to the Moodle page and the registration period for the winter semester 2019/20. A right sidebar provides contact information for the 'Ansprechpartner' (Contact Person) in the 'Sprachen Sekretariat', including a phone number and an email link. A 'News' section on the right lists recent updates, such as the 'Für Wiederholer BE 1' exam and the 'Next TOEFL (ITP)' exam.

ZIB
Zentralinstitut für Bildung
Sprachen

Ansprechpartner
Sprachen
Sekretariat
Telefon +49 3677 69 4656
E-Mail senden

Ihre Position: Zentralinstitut für Bildung / Sprachen

Sprachen

Allgemeine Information

Ab dem Wintersemester 2018/2019 finden Sie das gesamte Sprachangebot der TU Ilmenau in Moodle. Dort sind alle Informationen zu dem jeweiligen Sprachkurs hinterlegt.

Die Einschreibung in die einzelnen Sprachkurse erfolgt ebenso über Moodle (Zentralinstitut für Bildung --> Sprachen - Sommersemester): ➤ <https://moodle2.tu-ilmenau.de>

Einschreibezeitraum für das **WS 2019/20**:

vom **7.10.2019, 7:00 Uhr bis 14.10.19, 8:00 Uhr** - Englisch und alle fakultativen Sprachkurse

News

22.07.2019
Für Wiederholer BE 1
Klausur: Business English 1
Am 9. Oktober 2019, 10 Uhr, EAZ 2341

22.07.2019
Next TOEFL (ITP)
28 August 2019; at 1 p.m., in EAZ room 2341, exam fee: 90 euro

Non-Technical Courses

□ Several of Possible options

- ⇒ Research Skills
- ⇒ Academic Writing
- ⇒ Media, Communication and Economy
- ⇒ Media, Communication and Technology
- ⇒ Organisational Communication and Public Relations
- ⇒ Psychology of Technology
- ⇒ International and Intercultural Communication
- ⇒ Media, Communication and Politics
- ⇒ Methods in Empirical Communication Research
- ⇒ Trends in Communication and Media Theory

University Sports Center

❑ Sport programs

⇒ <https://www.tu-ilmenau.de/usz/>

Universitätssportzentrum

Campus-Sporthalle

Willkommen im Universitätssportzentrum

Ansprechpartner

Universitätssportzentrum
Sekretariat

Telefon +49 3677 69-2974
E-Mail senden

Ihre Position: Universität / Universitätssportzentrum

Universitätssportzentrum

Sportprogramm ist

Registration opens on 12th of October

https://sport.tu-ilmenau.de/angebote/aktueller_zeitraum/ zu finden!

ILMENAU

University Sports Center

Aikido
Badminton
Body Styling
Cheerleading
Fechten
Fitnessstraining
Gerättturnen
Intensiv-Workout /Fatburning
Karate
Kletterwandtraining
Lady Fitness
Mountainbiking
Orientierungslauf
Reiten
Rock'n'Roll
Rugby
Segeln (Theorie)
Show-Dance
Slacklining
Taijiquan
Tennis (individuell)
Unihockey
Yoga

American Flagfootball
Baseball
Boxen
Circuittraining
Fight Aerobic
Fußball
Handball
Jiu Jitsu
Kickboxen
Kobudo
Leichtathletik
Ninjutsu
Pilates
Rettungsschwimmen
Rope Skipping
Schach
Segelfliegen
Ski-/Langlauf-Krafttraining
Step Aerobic
Tauchsport
Tischtennis
Volleyball

Badminton
Basketball
Capoeira
Debattieren
Fitnessraumnutzung
Gesellschaftstanz
Indoor Cycling
Judo
Kletterkurs
Krafttraining unter Anleitung
Mittagsworkout
Nordic Walking
Power Aerobic
Ringen
Rücken Fit
Schwimmen
Shaolin Kempo
Squash
Taekwon Do
Tennis
Ultimate Frisbee
Wirbelsäulengymnastik

<https://www.tu-ilmenau.de/usz/> → sportangebot or einschreibung

Outline

- ❑ Master of Science in Communications and Signal Processing (MSCSP)
- ❑ MSCSP Program structure
- ❑ Lecture schedule & Guidelines
- ❑ Summary of regulations
- ❑ Additional information



Important dates

- ❑ Lectures start: **Oct. 12, 2020**
- ❑ Christmas (no lectures): **Dec. 21, 2020** until **Jan. 1, 2021**
- ❑ Registration for exams: **Jan. 8, 2021** until **Jan. 20, 2021**
 - ⇒ For some courses, registration in the beginning of the semester, **please mind information of lecturers / Emails from Examination office**
- ❑ Registration for the following semester: **Jan. 11, 2021** until **Jan. 29, 2021**
 - ⇒ **ASC** (Mensa building)
 - ⇒ Late registration is possible, but you will have to pay extra fee.
- ❑ Lectures end: **Feb. 5, 2021**
- ❑ Exams period: **Feb. 8, 2021** until **Mar. 31, 2021**

www.tu-ilmenau.de » [Lehre](#) » [Quick Links](#) » [S](#) » [Semestereckpunkte](#)

Open Time Table

Online Schedule

⇒ <https://opentimetable.tu-ilmenau.de/> (Student Set >> Fakultät EI >> CSP)

Open Timetable

View options: 07:00 - 21:00, Mon - Sat, Weeks: Woche 42 (2020)

Week: 42 (2020) 12 Oct-18 Oct 2020

SEARCH

Student Set:
Fakultät EIVS:
CSP:
Clear selected

Selected Courses:

- Master CSP FS1 Gruppe 1
- Master CSP FS1 Gruppe 2
- Master CSP FS3 Gruppe 1
- Master CSP FS3 Gruppe 2
- Master CSP Nach- und Wiederholer

Course Grid (Week 42, 2020):

Time	Mon	Tue	Wed
7:00			
8:00			
9:00	ADAPTIVE AND ARRAY SIGNAL PROCESSING Hörsaal LfV Hs 1 21 Presenter Vorlesung Leonardo da Vinci-Bau Adaptive and Array Signal Processing 12:51:54-58 12/10/2020 1 Health Prof. Staff 1 Master MT FS2 Gruppe2 + Master CSP FS3 Gruppe 2 + Master EIT F...	ADVANCED TOPICS IN COMMUNICATIONS AND SIGNAL PROC... e-Learning Vorlesung Advanced Topics in Communications and Signal Processing 42:51:54-58 12/10/2020 1 Health Prof. Staff 1 Master CSP FS3 Gruppe 2 + Master CSP FS3 Gruppe 1	ADVANCED DIGITAL SIGNAL PROCESSING Hörsaal Hs 1 17 Presenter Vorlesung Kirchhoffbau Advanced Digital Signal Processing 42:51:54-58 12/10/2020 1 Health Prof. Staff 1 Master CSP FS1 Gruppe1 + Master CSP FS1 Gruppe2
10:00			MEASUREMENTS IN COMMUNICATIONS e-Learning Vorlesung Measurements in Communications 42:51:54-58 14/10/2020 1 Del Galdo Prof. Staff 4, 1 Del Galdo Prof. Staff 2 Master CSP FS3 Gruppe 2 + Master CSP FS3 Gruppe 1
11:00	ADVANCED DIGITAL SIGNAL PROCESSING Seminarraum: Sr K.2022A 12 e-Learning Kirchhoffbau Advanced Digital Signal Processing 42:44:48-50:55:57 12/10/2020 1 Health Prof. Staff 2 Master CSP FS1 Gruppe 1	AUDIO CODING e-Learning Vorlesung Audio Coding 42:44:48-50:55:57 12/10/2020 1 Schüler Prof. Staff 2 Master CSP FS1 Gruppe 1	COMMUNICATION NETWORKS Hörsaal Hs 2 54 Presenter Vorlesung Hörsalhofbau Communication Networks (in English) 42:51:54-58 14/10/2020 1 Sella Prof. Staff 1 Master CSP FS1 Gruppe1 + Master MT FS2 Gruppe2 + Master CSP ...
12:00			
13:00	ADAPTIVE AND ARRAY SIGNAL PROCESSING e-Learning Vorlesung Adaptive and Array Signal Processing 42:51:54-58 12/10/2020 1 Health Prof. Staff 4 Master MT FS2 Gruppe2 + Master CSP FS3 Gruppe 2 + Master CSP ...	COMMUNICATIONS ENGINEERING e-Learning Vorlesung Communications Engineering 42:51:54-58 12/10/2020 1 Health Prof. Staff 2 Master CSP FS1 Gruppe1 + Master CSP FS1 Gruppe2	INFORMATION THEORY AND CODING e-Learning Vorlesung Information Theory and Coding 42:51:54-58 12/10/2020 1 Health Prof. Staff 2 Master CSP FS1 Gruppe1 + Master CSP FS1 Gruppe2
14:00			INFORMATION THEORY AND CODING e-Learning Vorlesung Information Theory and Coding 42:51:54-58 14/10/2020 1 Health Prof. Staff 2 Master CSP FS1 Gruppe1 + Master CSP FS1 Gruppe2
15:00			COMMUNICATIONS ENGINEERING Hörsaal Hs 2 58 Presenter Vorlesung Kirchhoffbau Communications Engineering 42:51:54-58 14/10/2020 1 Health Prof. Staff 4 Master CSP FS1 Gruppe1 + Master CSP FS1 Gruppe2

Courses

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
9:00 - 10:30		Adv. DSP Lecture K Hs 1	Com. Net. Lecture (online)	Mircro. Eng. Seminar Sr HU 010	
11:00 - 12:30	Adv. DSP Seminar Sr K 2002A	Com. Net. Lecture (online)			
13:00 - 14:30	Com. Eng. Lecture (online)	Inf. Th.&Cod. Lecture (online)	Com. Eng. Seminar (online)		
15:00 - 16:30	Inf. Th.&Cod. Seminar (online)		Mircro. Eng. Lecture Sr HU 211/212	Com. Net. Seminar Sr HU 201	
17:00 - 18:30			Inf. Th.&Cod. Seminar Sr HU 211/212		
19:00 - 20:30					(e) only even weeks (o) only odd weeks

Link: <https://opentimetable.tu-ilmenau.de/> (Student Set >> Fakultät EI >> CSP)

Visiting Time: Prüfungsamt EI (Examination Office K2079)

Examination Office EI

Tel.: 03677 69-2608

pruefungsamt-ei@tu-ilmenau.de



During the lecture period

Education consultant: Ms. Scheibe

Examination office: Ms. Lange

Secretary: Ms. Wallau

Tuesday / Wednesday / Thursday

8.30–10.00 a.m. available by phone
+49 3677 69-2608

Tuesday / Wednesday / Thursday

10.00–11.30 a.m. you can pick up documents
(room 2079b)

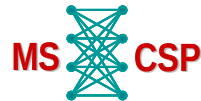
Tip: Please note: documents should be submitted / picked up during the visiting time.

<https://www.tu-ilmenau.de/ei/im-studium/referat-bildung-und-pruefungsamt/>

Contacts

For questions regarding the Master's program please contact:

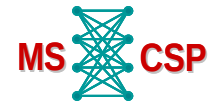
Program Director



Prof. Dr.-Ing. Martin Haardt

E-Mail: martin.haardt@tu-ilmenau.de
Phone: +49 (3677) 69-2613
Fax: +49 (3677) 69-1195

Program Manager



M.Sc. Damir Rakhimov

E-mail: mscsp@tu-ilmenau.de
Phone: +49 (3677) 69-2673,
Fax: +49 (3677) 69-1195

Applications:

Examination Office



Cornelia Scheibe

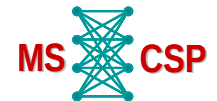
Room: K 2079
E-mail: Pruefungsamt-ei@tu-ilmenau.de
Phone: +49 (3677) 69-2608

Student Council Ei



Room: K 2075
Email: fachschaftsrat-ei@tu-ilmenau.de
Phone: +49 3677 691451

Student representatives



Sayako Kodera

E-mail: sayako.kodera@tu-ilmenau.de

Veeraiha Yarasi

E-mail: veeraiah.yarasi@tu-ilmenau.de

http://www.tu-ilmenau.de/ei_ms_csp

Outline

- ❑ Master of Science in Communications and Signal Processing (MSCSP)
- ❑ MSCSP Program structure
- ❑ Lecture schedule & Guidelines
- ❑ Summary of regulations
- ❑ Additional information



General Regulations

Important points for all Master students

□ § 26 Approval of credit points from other programs

- ⇒ the examinations board decides
- ⇒ an application form per module must be handed in
- ⇒ equivalence must be decided (by the Professor)
- ⇒ grades are then transferred (credit points as at TUI)

□ §23 ff. Master's thesis

- ⇒ the legal rights belong to the student. Dissemination to 3rd persons or commercial usage requires a written agreement with the responsible Professor.

General Regulations

Important points for all Master students

□ §16 Exams

- ⇒ Please keep in mind the **registration periods**
- ⇒ There is **early registration** for some exams (information about dates is sent via email)
- ⇒ Withdrawal from an exam is possible (deadline 4 days before, alternative exams excepted)

□ §17 Grades

- ⇒ 1 (very good), 2 (good), 3 (satisfying), 4 (sufficient), 5 (not sufficient)
- ⇒ **scale**: 1.0, 1.3, 1.7, 2.0, 2.3, 2.7, 3.0, 3.3, 3.7, 4.0, 5.0
- ⇒ Some modules work with additional **bonus points**
 - up to 30% of an exam can be bonus points during the semester

□ §19 Repetition of exams

- ⇒ **Each exam can be repeated once.**
 - For **three exams** also a second repetition is allowed
 - For the second repetition you can apply for an oral exam
- ⇒ Repetitions must always be done **within the 2 following semesters**

Specific Regulations

Important points for MSCSP students

□ § 21 Free attempts & Grade improvements (Bonus system)

- ⇒ Four exams can be marked as a free attempt or a grade improvements (all together)
- ⇒ Prerequisite: 1st exam took place in the regular semester regarding the study plan.
- ⇒ **Free attempts** count for **failed exams**, **Grade improvements** for **passed exams**
- ⇒ You have to declare free attempts within 2 semesters after a failed exam and before the repetition. Once you have declared it, there is no repetition period anymore and you decide when you (again) take the first examination attempt.
- ⇒ **Free attempts Can't be taken anymore** after repetition of an exam.

□ § 24 Master's thesis

- ⇒ should be written in English
- ⇒ ends with a presentation of about 45 minutes and discussion

Specific Regulations

Free attempts – an Example

- ❑ In summer semester 2020 Majid was in his 2nd semester and took the exams in the modules "**Microwave Engineering**" and "**Mobile Communications**" for the first time, but failed both.
- ❑ Majid would like to repeat these examinations in the winter semester 2020/21. Can he register one free attempt for each exam?
 - ⇒ "**Microwave Engineering**" : **no**, as this was only taken in the 2nd semester (regular 1st semester).
 - ⇒ "**Mobile Communications**": **yes**, because it was regularly taken in the 2nd semester.
- ❑ At the time of registering for the exam, however, Majid considers that he would like to hear the lecture "**Mobile Communications**" again before repeating it. Will he be able to register for the free trial until SS 2021?
 - ⇒ **Yes**, because there is always 2 semesters time for a repetition and therefore declaration of the free attempt.

1. Semester	CP	2. Semester	CP
Microwave Engineering	4	Mobile Communications	8

Study conditions

Important points for MSCSP students

□ Course setup

- ⇒ 3 semesters (90 CPs) + 1 semester Master's thesis (30 CPs)
- ⇒ significant parts in self-study manner, e.g., via homeworks

□ appendix

- ⇒ course outline (as available on the web page)

www.tu-ilmenau.de » Studierende » A bis Z » V » Vorlesungsverzeichnis »
VLV Wintersemester » Vorlesungsverzeichnis Wintersemester »
Communications and Signal Processing (CSP) 1.FS

Outline

- ❑ Master of Science in Communications and Signal Processing (MSCSP)
- ❑ MSCSP Program structure
- ❑ Lecture schedule & Guidelines
- ❑ Summary of regulations
- ❑ Additional information



Further Information: Software

❑ Software available for students:

⇒ <https://www.tu-ilmenau.de/it-service/studierende/software/>

The screenshot displays the UniRZ IT Service Desk website. At the top left is the logo for the UNIVERSITÄTS RECHENZENTRUM. To the right is a contact box for the Ansprechpartner, UniRZ IT Service Desk, with the phone number +49 3677 69-1111 and a link to send an email. Below the header, the breadcrumb trail reads: Ihre Position: UniRZ / IT-Services / Studierende / Software / Verfügbare Lizenzen. A search bar is located to the right of the breadcrumb. On the left side, there is a navigation menu with the following items: IT Service Desk, Studierende (highlighted), Cloud, E-Mail, File Transfer, Fileservice, IT-Security, moodle, Print, Software (highlighted), Softwarebereitstellung, and Verfügbare Lizenzen (highlighted). The main content area is titled 'Verfügbare Lizenzen' and contains the text: 'Auf dieser Seite finden Sie Lizenzen, die für Sie zur Verfügung stehen.' Below this, there is a list of available licenses, each preceded by a plus sign: Microsoft Office 365 ProPlus für Studierende, MS "Azure Dev Tools für den Unterricht" (ehemals MS Imagine - Webshop, ELMS), think-cell, EndNote, Citavi 6, OriginPro HomeUse, and Visual Paradigm.

Useful links

- ❑ MSCSP Webpage
 - ⇒ <https://www.tu-ilmenau.de/ei-ms-csp/>
- ❑ Examination Office
 - ⇒ [Contact and Visiting Time](#)
- ❑ Academic Service Center (ASC)
 - ⇒ [Information for students](#)
- ❑ Information of MSCSP Program (in German)
 - ⇒ [Handbook of Courses and Regulations](#)
 - ⇒ [Examination Regulations, English Version](#)
 - ⇒ [Academic regulations, English Version](#)
- ❑ Webpage of Faculty of Electrical Engineering and Information Technology
 - ⇒ <https://www.tu-ilmenau.de/ei/>
- ❑ Study organization
 - ⇒ [Semester key dates - Winter Semester 2020/2021](#)
 - ⇒ [Course Schedule CSP](#) (Student Set >> Fakultät EI >> CSP)
- ❑ Buildings and Lecture rooms
 - ⇒ [Overview](#)

