

Fachbereich 18

Information and Communication Engineering

The first electrical engineers...



TECHNISCHE
UNIVERSITÄT
DARMSTADT

Change of the examination regulations



etit

Information about changes in examination regulations



- **„PO 2023“**
- **New structure**
- **New rules**
- **Target group**
- **Application**



„PO 2023“ = „Prüfungsordnung 2023“

= Rules and study plans to follow

- Replaces the old „Prüfungsordnung 2014“
- Starting on 1st October 2023
- For all new 1st semester students automatically, and for enrolled iCE-students if they apply for it.
- Your old „Prüfungsordnung 2014“ remains valid minimum until end of winter semester 2024/25.
- More flexibility: fixed „Mandatory“ versus flexible „Core competencies“

Sample curriculum general



1. Semester	2. Semester	3. Semester	4. Semester
Core Competencies (min. 7 modules)			Master`s thesis (30 CP)
Optionals Hardware or Systems or Algorithms (min. 28 CP)			
Optionals supplements			
Studium Generale (min. 12 CP) German (min. 1 module) Open catalogue (Humanities and Social sciences)			

Sample curriculum „Hardware“



1. Semester	2. Semester	3. Semester	4. Semester
Advanced Digital Integrated Circuit Design (6 CP)	Mobile Communications (6CP)		Master`s thesis (30 CP)
Antennas and Adaptive Beamforming (6 CP)	Optical Communications-Components (6 CP)		
Technical Electrodynamics for iCE (5 CP)	Optionals Hardware or Systems or Algorithms (min. 28 CP)		
Communication Technology II (5 CP)	Optionals supplements		
Digital Signal Processing (6 CP)			
Studium Generale (min. 12 CP) German (min. 1 module) Open catalogue (Humanities and Social sciences)			

Sample curriculum „**Systems**“

1. Semester	2. Semester	3. Semester	4. Semester
Communication Technology II (5 CP)	Data-driven Modeling- Machine Learning (6 CP)		Master`s thesis (30 CP)
Digital Signal Processing (6 CP)	Mobile Communications (6CP)		
Communication Networks II (6 CP)	Matrix Analysis and Computations (6 CP)		
Antennas and Adaptive Beamforming (6 CP)			
Optionals Hardware or Systems or Algorithms (min. 28 CP)			
		Optionals supplements	
Studium Generale (min. 12 CP) German (min. 1 module) Open catalogue (Humanities and Social sciences)			

Sample curriculum „Algorithms“



1. Semester	2. Semester	3. Semester	4. Semester
Communication Technology II (5 CP)	Convex Optimization in Signal Processing and Communications (6 CP)		Master`s thesis (30 CP)
Digital Signal Processing (6 CP)	Data-driven Modeling- Machine Learning (6CP)		
Communication Networks II (6 CP)	Matrix Analysis and Computations (6 CP)		
Advanced Digital Integrated Circuit Design (6 CP)			
Optionals Hardware or Systems or Algorithms (min. 28 CP)			
Optionals supplements			
Studium Generale (min. 12 CP) German (min. 1 module) Open catalogue (Humanities and Social sciences)			

**FAQ:**

The courses listed above in the Core Competencies are recommendations. You can choose according to your own needs and mix the courses.

You may choose a different major in the Core Competencies than in the Optionals.

https://www.etit.tu-darmstadt.de/ice/service_1/downloads_9/downloads.en.jsp

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7 courses out of 11

1. Core Competencies (min. 7 modules; min. 40 CP, max. 42 CP)												o		40-42	24	18	0	0
18-ho-2010	Advanced Digital Integrated Circuit Design	St	K		90	1	1		f		VL			6	6			
18-ho-2010-vl	Advanced Digital Integrated Circuit Design									3								
18-ho-2010-ue	Advanced Digital Integrated Circuit Design									1								
18-jk-2020	Antennas and Adaptive Beamforming	St	K		90	1	1		f		VL			6	6			
18-jk-2020-vl	Antennas and Adaptive Beamforming									3								
18-jk-2020-ue	Antennas and Adaptive Beamforming									1								
18-sm-2010	Communication Networks II	St	K		120	1	1		f		VL			6	6			
18-sm-2010-vl	Communication Networks II									3								
18-sm-2010-ue	Communication Networks II									1								
18-kl-2010	Communication Technology II	St	K		90	1	1		f		VL			5	5			
18-kl-2010-vl	Communication Technology II									2								
18-kl-2010-ue	Communication Technology II									2								
18-pe-2020	Convex Optimization in Signal Processing and Communications	St	mP/K		20/120	1	1		f		VL			6		6		
18-pe-2020-vl	Convex Optimization in Signal Processing and Communications									2								
18-pe-2020-ue	Convex Optimization in Signal Processing and Communications									1								
18-pe-2020-pr	Convex Optimization in Signal Processing and Communications Lab									1								
18-zo-2060	Digital Signal Processing	St	K		180	1	1		f		VL			6	6			
18-zo-2060-vl	Digital Signal Processing									3								
18-zo-2060-ue	Digital Signal Processing									1								
18-kp-2110	Data-driven Modeling - Machine Learning	St	mP/K		30/120	1	1		f		VL			6		6		
18-kp-2110-vl	Data-driven Modeling - Machine Learning									2								
18-kp-2110-ue	Data-driven Modeling - Machine Learning									1								
18-kp-2110-pr	Data-driven Modeling - Machine Learning Lab									1								
18-pe-2070	Matrix Analysis and Computations	St	mP/K		20/120	1	1		f		VL			6		6		
18-pe-2070-vl	Matrix Analysis and Computations									3								
18-pe-2070-ue	Matrix Analysis and Computations									1								
18-kl-2020	Mobile Communications	St	K		90	1	1		f		VL			6		6		
18-kl-2020-vl	Mobile Communications									3								
18-kl-2020-ue	Mobile Communications									1								
18-pr-1050	Optical Communications – Components	St	K		90	1	1		f		VL			6		6		
18-pr-1050-vl	Optical Communications – Components									3								
18-pr-1050-ue	Optical Communications – Components									1								
18-dg-2150	Technical Electrodynamics for iCE	St	K		180	1	1		f		VL			5		5		
18-dg-2150-vl	Technical Electrodynamics for iCE									2								
18-dg-2150-ue	Technical Electrodynamics for iCE									2								

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2. Optionals (min. 28 CP; min./max. 1 subarea) [Modulwechsel nach APB § 30 Abs. 5]			o	28-48	0	10	18	0
2.1. Communication Hardware			f	28-48	0	10	18	0
2.1.1. Communication Hardware - Lectures (min. 2 modules)			o	2-47	0	4	6	0
...								
2.1.2. Communication Hardware - Labs and Projects (min. 1/max. 3 modules)			o	1-46	0	6	12	0

2.2. Communication Systems and Networking			f	28-48	0	10	18	0
2.2.1. Communication Systems and Networking - Lectures (min. 2 modules)			o	2-47	0	10	4	0
...								
2.2.2. Communication Systems and Networking - Labs and Projects (min. 1/max. 3 modules)			o	1-46	0	0	14	0

2.3. Communication Algorithms			f	28-48	0	10	18	0
2.3.1. Communication Algorithms - Lectures (min. 2 modules)			o	2-47	0	4	10	0
...								
2.3.2. Communication Algorithms - Labs and Projects (min. 1/max. 3 modules)			o	1-46	0	6	8	0

Minimum 28 CP
 Minimum 2 Lectures
 Minimum 1 Lab or Project / Maximum 3 Labs or Projects

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3. Optional supplements			f	0-10	0	0	0	0
alle Module aus den subareas 2.1, 2.2, 2.3 (MOD: Verwendung der o.g. Kursbereiche)								
4. Studium Generale (min. 12 CP) [Modulwechsel nach APB § 30 Abs. 6]			o	12-20	6	3	11	0
4.1 Geistes- und Gesellschaftswissenschaften			f	0-17	0	0	0	0
4.2 Entrepreneurship und Management			f	0-17	0	3	6	0
4.3 Ingenieur- und Naturwissenschaften			f	0-17	3	0	5	0
Angebote des FB4, FB5, FB7, FB10, FB11, FB13, FB16 und FB20								
4.4 Sprachen, Soft Skills			o	3-20	3	0	0	0
4.4.1. Deutsch als Fremdsprache (min. 1 Modul)			o	3	3	0	0	0
Alle Deutschkurse des Sprachenzentrums								
4.4.2. Foreign Languages, Soft Skills			f	0	0	0	0	0
Angebote des Sprachenzentrums und weitere								

Optional supplements: 0 – 10 CP

Studium Generale: Minimum 12 CP, Minimum 3 CP German course

90 CP overall
+ 30 CP Master thesis

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Table of equivalence,
see webpage

Module nach PO 2014			CP	Module nach PO 2023				
I. Mandatory			33	M.Nr.	Core Competencies	CP	Delta (neu-alt)	in Bereich
18-ho-2010	Advanced Digital Integrated Circuit Design (V3 + Ü1)	o	6	18-ho-2010	Advanced Digital Integrated Circuit Design (V3 + Ü1)	6	0	1. Core Competencies oder 2.1.1. Hardware oder 3. Optional supplements
18-zo-2060	Digital Signal Processing (V3 + Ü1)	o	6	18-zo-2060	Digital Signal Processing (V3 + Ü1)	6	0	1. Core Competencies oder 2.2.1. Systems oder 2.3.1. Algorithms oder 3. Optional supplements
18-dg-2150	Technical Electrodynamics for iCE (VL2+Ü2)	o	5	18-dg-2150	Technical Electrodynamics for iCE (VL2+Ü2)	5	0	1. Core Competencies oder 2.1.1. Hardware oder 3. Optional supplements
18-pr-1050	Optical Communications – Components (V3 + Ü1) (formerly 18-ku-1060)	o	6	18-pr-1050	Optical Communications – Components (V3 + Ü1) (formerly 18-ku-1060)	6	0	1. Core Competencies oder 2.1.1. Hardware oder 3. Optional supplements
18-kl-2010	Communication Technology II (V2 + Ü1)	o	4	18-kl-2010	Communication Technology II (V2 + Ü1)	5	1	1. Core Competencies oder 2.2.1. Systems oder 3. Optional supplements
18-sm-2010	Communication Networks II (V3 + Ü1)	o	6	18-sm-2010	Communication Networks II (V3 + Ü1)	6	0	1. Core Competencies oder 2.3.1. Algorithms oder 3. Optional supplements
X	X			18-jk-2020	Antennas and Adaptive Beamforming	6	0	1. Core Competencies oder 2.1.1. Hardware oder 2.2.1. Systems oder 3. Optional supplements
X	X			18-pe-2020	Convex Optimization in Signal Processing and Communications	6	0	1. Core Competencies oder 2.2.1. Systems oder 2.3.1. Algorithms oder 3. Optional supplements
X	X			18-kp-2110	Data-driven Modeling - Machine Learning	6	0	1. Core Competencies oder 2.2.1. Systems oder 2.3.1. Algorithms oder 3. Optional supplements
X	X			18-pe-2070	Matrix Analysis and Computations	6	0	1. Core Competencies oder 2.2.1. Systems oder 2.3.1. Algorithms oder 3. Optional supplements
X	X			18-kl-2020	Mobile Communications	6	0	1. Core Competencies oder 2.2.1. Systems oder 2.3.1. Algorithms oder 3. Optional supplements

**Core Competencies:**

Modules that you have not completed or that you failed can be deselected upon request.

Optionals:

Once a module that has not been completed can be deselected upon request, so that the module is not shown on the transcript.

Optional supplements, Studium Generale:

Any number of times a module that has not been completed may be deselected as often as desired, so that the repeat examinations required are omitted and the module is not shown on the transcript.

In case you switch to the new exams rules (PO 2023):

Courses that you deselect: failed attempts are not counted.

Courses that you want to keep: failed attempts count.

In case of failed 3rd attempt plus additional oral exam, you don` t have a second chance!

Do not register for the 3rd examination attempt! If you fail, you will be exmatriculated!



- **Students with failed attempts in Mandatory courses.**
- **Especially when you have 2 failed attempts in Mandatory courses and/or Optional courses.**
- **Students who want to have more flexibility.**
- **Students at the beginning of the study, especially when you did not perform lots of Mandatorys so far.**

**Application:**

Via formular which you find on the webpage: https://www.etit.tu-darmstadt.de/ice/service_1/downloads_9/downloads.en.jsp

Add your new study plan: Take the Excel file from same webpage. Leave only the courses you want to choose in it and delete the others.