

# International Course “Telecommunications and Electronics”

Dear Reader,

The following lines serve the purpose of giving potential future students general information on the department’s international course “Telecommunications and Electronics” which is taught in German (Kaiserslautern) and English (London).

Based on an agreement between the University of East London (UEL) and the Fachhochschule Kaiserslautern, Kaiserslautern’s department of electrical engineering and information technology can offer a study programme leading to the dual award “Dipl.-Ing. (FH)/BEng (Hons)” after successful completion of the course.

The department provides study courses in the fields of automation and power engineering, telecommunications and engineering computing – the international focus “Telecommunications and Electronics” as a part of the main course is embedded in telecommunications.

The BEng (Hons) Electrical & Electronic Engineering course which is offered as a special programme of study by the University of East London to students from the Fachhochschule Kaiserslautern involves students who are currently studying on the Dipl.-Ing. (FH) and are interested in developing their engineering skills for a global market whilst enhancing their capabilities in the English language. Students who are interested in participating in this programme would therefore have undertaken preliminary studies on the Dipl.-Ing. (FH) in Kaiserslautern before progressing to the University of East London.

The international course comprises a three-semester basic course and a five-semester main course. The main course provides for a practical semester which is placed in the 7<sup>th</sup> semester. Semesters 5 and 6 of the joint course are reserved for the academic year at the University of East London, which requires a successful completion of the basic course in Kaiserslautern. The final project can be carried out either in Germany or in the UK.

The award of the Dipl.-Ing. (FH) and the grade of the award are entirely the provenance of the Fachhochschule Kaiserslautern and governed by the regulations for the award currently in force at that institution. The award of the BEng (Hons) and the grade of the award are entirely the provenance of the University of East London and subject to the rule and regulations currently in force at that institution. However, the course has been designed in such a way that a student is unlikely to be able to receive one award and not the other.

For further information, please find attached the syllabi of the basic course and main course of the department’s international study programme.

If you have additional questions on the course (in English or German), please turn to Dr. Kurt Heil, e-mail: [heil@et.fh-kl.de](mailto:heil@et.fh-kl.de)

With kind regards,

Dr. phil. Kurt Heil  
International Relations Officer  
Department of Electrical Engineering and Information Technology  
Fachhochschule Kaiserslautern – University of Applied Sciences

Course of Study: **Communication and Telecommunication Engineering**

**Basic Course**

FA	Subject	Semester week/hr: SWS						
		Sem. 1 (WS)		Sem. 2 (SS)		Sem. 3 (WS)		Total
		SWS	Pr.	SWS	Pr.	SWS	Pr.	SWS
PF	Fundamentals of Electrical Engineering I	6	P					6
PF	Fundamentals of Electrical Engineering II,III			6+1L	SL	6+1SÜ	P,SL	14
PF	Mathematical Analysis I	7	P					7
PF	Mathematical Analysis II,III			4+3+1SÜ	P,SL			8
PF	Linear Algebra	4	P					4
PF	Signals and Systems					4+1SÜ	P,SL	5
PF	Introduction to Technical Physics I, II	2	P	4+1L		2+1L	P,SL	10
PF	Electrical Measurement Technology I			2		1+2L	P,SL	5
PF	Electronic Components and Circuit Fundamentals	2		2		2	P	6
PF	Fundamentals of Computer Science I	2+1Ü		1+1Ü	P,SL			5
PF	Fundamentals of Computer Science II			4		7+2Ü	P,SL	13
PF	Technical English I	2		2	P			4
W	Options (*)							4
	<b>Semester week/hr without Options</b>	<b>26</b>		<b>32</b>		<b>29</b>		<b>87</b>
	<b>Semester week/hr with Options</b>							<b>91</b>
	<b>Examinations</b>		<b>4</b>		<b>3</b>		<b>6</b>	<b>13</b>
	<b>Special Performances</b>				<b>3</b>		<b>5</b>	<b>8</b>

FA: Type of Subject, PF: Compulsory Subject, W: Option, SÜ: Seminar Exercise, L: Laboratory, Ü: Exercise, P: Examination, SL: Special Performance, (\*): Seminar Exercises in Basic Subjects

**Course of Study: TELECOMMUNICATIONS Main Course**  
**International Focus**  
**TELECOMMUNICATIONS and ELECTRONICS**

FA	Subject	Semester week/hr: SWS (1 unit = 8 SWS)										Total	
		Sem. 4		Sem. 5		Sem. 6		Sem. 7 Pr.Sem.		Sem. 8			
		SWS	Pr.	Ort	Pr.	Ort	Pr.	SWS	Pr.	SWS	Pr.		SWS
PF	Analogue & Digital Electronics												
	Analogue Electronics & ECAD			UEL	P,SL								4
PF	Digital Electronics			UEL	P								4
PF	Digital Signal Processing			UEL		UEL	P						10
PF	Embedded Systems			UEL	P								4
PF	Computer Communications												4
	Data Communications					UEL	P						4
PF	Computer Networks			UEL		UEL	P						10
PF	Telecommunications												4
	Analogue Communications					UEL	P						4
PF	Digital Communications			UEL	P								4
PF	Fundamentals of Control Engineering					UEL	P						4
PF	Software Engineering			UEL	P								4
PF	High Frequency Engineering I,II	6 +2L	P,SL	L3									8
PF	Information Transmission I,II	4	P	L2									4
PF	Electromagnetic Compatibility (EMC)	2	P	L2									2
PF	Microprocessor Systems	4 +1L	P,SL	L2									5
PF	Technical English II	4	P	L2									4
PF	Mini Project			L2				2	P				2
WP	Technical Compulsory Options	4	P/ P,P	L2									4
WP	Non-Technical Compulsory Options	4	P/ P,P	L2									4
W	Options												2
PF	Seminar to Practical Semester							1	SL				1
PF	Seminar for Students Taking Dipl. Exam									1	MP		1
PF	Final Project			L3						o			
	<b>Semester week/hr without Options</b>	<b>31</b>		<b>30</b>		<b>22</b>		<b>3</b>		<b>1</b>			<b>87</b>
	<b>Semester week/hr with Options</b>												<b>89</b>
	<b>Examinations</b>		<b>7-9</b>		<b>5</b>		<b>5</b>		<b>1</b>		<b>1</b>		<b>19-21</b>
	<b>Special Performances</b>		<b>2</b>		<b>1</b>				<b>1</b>				<b>4</b>

FA: Type of Subject, Ort: Location, **UEL: University of East London**, PF: Compulsory Subject, WP: Compulsory Option, W: Option, L: Laboratory, Pr.Sem.: Practical Semester, Pr.: Examination, P: Written Examination, MP: Oral Examination, SL: Special Performance, L2: Level 2, L3: Level 3