List of courses taught in English – 2020/21
(Spring 2021)

THU is offering a variety of courses taught in English. Please note that the programs have different semester times

Academic Calendar		
International Engineering Programs IMEP, ICEP and IEEP (3-month-program)	Fall semester: Exams:	**IMEP:** October – December + free intensive German course in September Mid-December
	Spring semester: Exams: Holidays:	**ICEP + IEEP:** April - June + free intensive German course in March (Possibility for IEEP students to stay for a laboratory project in July) last week of June 2 weeks in May/June (Pentecost)
Regular Semester Programs	Fall semester Start: Holidays: Exams:	 Beginning of October 2 weeks in Dec/Jan (Christmas) first 2 weeks of February
	Spring semester Start: Holidays: Exams:	 Beginning of March 2 weeks in May/June (Pentecost) last 2 weeks of July

A) International Engineering Program (IEP) - 3-month-program
→ International Mechanical Engineering Program – IMEP
→ International Electrical Engineering Program – IEEP
→ International Computer Engineering Program - ICEP

B) Full semester programs
→ International Semester Program in Energy Economics – SPEEC
→ International Semester Program in Business – SPiB
→ Digital Media Program - SPDM
→ Bachelor Degree Program in Computer Science - SPCTS
→ Courses offered by different faculties

C) Master-Level Courses taught in English
→ M. Sc. Degree Program in Information Systems
→ M. Eng. Degree Program in Medical Devices – Research and Development
→ Courses offered by different faculties

D) German Language courses

A) International Engineering Program (IEP) - 3 Month Program

Please note: Semester times are different from our regular semester times.
Detailed course description: www.thu.de/internationals (Downloads)

Spring 2021

Department / Study Program	Lecturer	Title	ECTS credits	Fall semester 1. Oct - 23. Dec	Spring semester 1. April - 30. June
Production Engineering / IMEP					
IMEP	Peranio	Mathematics for Engineeers (Intensive course September)	1	X	
	t.b.a.	German for Beginners 1 (Intensive Course September)	2	X	
	t.b.a.	Ankommen in Deutschland – Language and Culture (Previous knowledge of A2 required) (Intensive Course September)	2	X	
	Wehrheim / Böhm	CAD/CAM	4	X	
	Beckmann	Dynamics I	4	X	
	Beckmann	Dynamics II	4	X	
	Hüser / Hartberger	Lean Production Systems	4	X	
	Commerell	System Automation	4	X	
	Renze	Applied Thermal-Fluid Systems	4	X	
	Arlitt	Fluid Mechanics	4	X	
	Kabza	Fuel Cells	4	X	
	Watty	Collaborative Product Development (CPD)	4	X	
Electrical Engineering / IEEP					
IEEP	Terzis	Digital Integrated Circuits	4		X
	Beckmann	Control Technology	4		X
	Professors of EE Department	EE Advanced Project Work	4		X
Computer Engineering / ICEP					
ICEP	Steiper	Computer Networks	4		X
	Frey	Machine Vision	4		X
	Traub	Operating Systems	4		X
	Strahnen	Computer Architecture	4		X
Social Sciences					
IMEP	McLeod	Germany within Europe	4	X	
I / ICEP and E / IEEP	Kratzer	Germany In The Last Three Centuries	4		X

B) Full Semester programs (Bachelor Level)

Those courses are offered during the German regular semester times, mixing IEP courses and semester program courses is NOT possible. Please note: It is possible that courses may take place at the same time. Students should choose only courses from <u>one</u> department.

*students should choose either Block 1 or 2 to avoid overlappings of courses

Detailed course description of SPEEC and SPiB: **www.thu.de/internationals** (Downloads)

Department / Study Program	Lecturer	Title	ECTS credits	Fall semester (October - February)	Spring semester (March - July)	Course code / specific infor-mation
P		Department of Production Engineering and Production Economics / International Semester Program in Energy Economics - SPEEC				
P / SPEEC – Block 1*	Otto/Schlüter	Operations Research	5	X	X	
P / SPEEC – Block 1*	Gaisbauer-Pointner	Performance Management	5	X	X	CKLM
P / SPEEC – Block 1*	Herbort	Analytics for Energy Data	5	X	X	AFED
P / SPEEC – Block 1*	Kleiser	Energy Efficiency	5	X	X	
P / SPEEC – Block 1*	Böhm	Power Plant Technology	5	X	X	KRAT
P / SPEEC – Block 2*	Otto	Energy Trading and Risk Management	5	X	X	ETRM
P / SPEEC – Block 2*	Heilscher	Energy Data Management	5	X	X	EDAT
P / SPEEC – Block 2*	Otto / Heilscher	Seminar in Energy Economics	5	X	X	
P / SPEEC – Block 2*	Iniotakis	Simulation	5	X	X	
P / SPEEC – Block 1 + 2*	Heilscher / Arlitt	Energy Meteorology	5	X		
P / SPEEC – Block 1 + 2*	Gaisbauer-Pointner	Intercultural Communication	2	X	X	
P / SPEEC – Block 1 + 2*	Dippe	Leadership and Business Communication	5	X	X	
P / SPEEC – Block 1 + 2*	All professors	Project in Energy Economics	10	X	X	

Department / Study Program	Lecturer	Title	ECTS credits	Fall semester (October - February)	Spring semes-ter (March - July)	Course code / specific infor-mation
P		**Department of Production Engineering and Production Economics / International Semester Program in Business - SPiB**				
P / SPiB	Gaisbauer-Pointner	Performance Management and Cost Accounting	5	X	X	See prerequi-sites
P / SPiB	Dippe	Leadership and Business Communication	5	X	X	
P / SPiB	Cürten	Cross Cultural Management	5	X	X	
P / SPiB	Gaisbauer-Pointner	Sustainability and the Environment	5		X	
P / SPiB	Otto / Schlüter	Operations Research	5	X	X	
P / SPiB	Otto	Energy Trading and Risk Management	5	X	X	
P / SPiB	Iniotakis	Simulation	5	X	X	
P / SPiB	McLeod	Germany within Europe	4	X		
P / SPiB	Kratzer	Germany within the last three centuries	4		X	
P / SPiB	Gaisbauer-Pointner	Intercultural Communication	2	X	X	
P / SPiB	All professors	Project in Energy Economics	10	X	X	

Department / Study Program	Lecturer	Title	ECTS credits	Fall semester (October - February)	Spring semes-ter (March - July)	Course code / specific infor-mation
P		**Department of Production Engineering and Production Economics**				
P / Production Engineering	Baumgärtel	Distribution Logistics	6 (4)	X	X	
P / Production Engineering	Westhoff / Baumgärtel	Business Information Systems	4	X	X	
P / Production Engineering	Heilscher / Arlitt	Energy Meteorology	5	X		
P / Production Engineering	Commerell	System Automation	4	X	X	
P / Production Engineering	Commerell	Energy Storages	4	X	X	
P / Production Engineering	t.b.a.	Advanced Project	5-10	X	X	
I		**Department of Computer Science** **I / Computer Science:** Complete Bachelor Program is offered in English				
1. Semester courses:						
	Groß	Calculus 1	5	X		
	Steiper	Introduction to Computer Science	5	X		
	Kratzer	Programming 1	5	X		
	Frey	Technical Foundations of Computer Science	5	X		
2. Semester courses						
	Groß	Linear Algebra	5		X	
	Kratzer	Programming 2	5		X	
	Steiper	Computer Networks	5		X	
	Kratzer	Databases	5		X	
	Strahnen	Microcomputer Technology	5		X	

Department / Study Program	Lecturer	Title	ECTS credits	Fall semester (October - February)	Spring semes-ter (March - July)	Course code / specific infor-mation
3. Semester courses						
	Groß	Calculus 2	5	X		
	Baer	Programming 3	5	X		
	Schied	Theoretical Computer Science	5	X		
4. Semester courses						
	Baer	Software Engineering	5		X	
	Traub	Operating systems	5		X	
	Schied	Algorithms and Data Structures	5		X	
	Groß	Stochastic	5		X	
5. Semester courses						
	NN	Seminar	5	X		
	Schäffter	Distributesd & Webbased Systems	5	X		
	NN	Software Project	5	X		
6. Semester courses						
	Dippe	Business Economics	5		X	
Special Subjects / Electives:						
3. Semester	Frey	Digital Systems	5	X		admission restricted
3. Semester	Strahnen	Embedded Systems	5	X		admission restricted
3. Semester	Schäffter	Information Security Management	5	X		admission restricted
3. Semester	Graf	Mobile Application Development	5	X		admission restricted
3. Semester	Frey	Machine Vision	5	X		admission restricted
4. Semester	Frey	Hardware oriented Programming	5		X	admission restricted
4. Semester	Schlegel	Realtime Systems	5		X	admission restricted
4. Semester	Schäffter	Digital Forensics	5		X	admission restricted

Department / Study Program	Lecturer	Title	ECTS credits	Fall semester (October - February)	Spring semes-ter (March - July)	Course code / specific infor-mation
4. Semester	Traub/Buchen scheit	Web Engineering	5	X	X	admission restricted
4. Semester	Hasbargen	Game Programming	5		X	admission restricted
4. Semester	Strahnen	Multicore Systems Programming and Performance	5		X	admission restricted
5. Semester	Strahnen	Computer Architecture	5	X		admission restricted
5. Semester	Schlegel	Autonomous Systems	5	X		admission restricted
5. Semester	Schäffter	Pentesting	5	X		admission restricted
5. Semester	Steiper	Adhoc & Sensor Networks	5	X		admission restricted
5. Semester	Franz	Computer Graphics	5	X		admission restricted
I / Business information Systems	Herbort	Database Programming	5	X	X	Please ask for Pre-requisites
I / Business information Systems	Goldstein	Data Warehousing	5	X	X	admission restricted Please ask for Pre-requisites
I / Data Science in Medicine	Vögel	Medical Information Systems	5	X	X	
T	**Department of Medical Engineering and Mechatronics**					
T / Mechatronics / Medical Engineering	Groß/ Blechschmidt	Microcontroller Applications	5	X	X	89500
T / Medical Engineering	Blechschmidt	Technical Security in Medicine	5		X	91100
T / Mechatronics / Medical Engineering	t.b.a.	Advanced Project	10	X	X	

Department / Study Program	Lecturer	Title	ECTS credits	Fall semester (October - February)	Spring semes-ter (March - July)	Course code / specific infor-mation
E		Department of Electrical Engineering and Information Technology / Digital Media - open for enrollment ONLY for design students				
E / Digital Media Program	Radtke	Corporate Design	8	X		
E / Digital Media Program	Götz	Ergonomics / Universal Design	5	X	X	
E / Digital Media Program	Gaida	Image Conception	5	X		
E / Digital Media Program	Gerbaulet	Interaction Design 1	10	X		
E / Digital Media Program	Kruse	Motion Capturing	5	X	Demand necessary	
E / Digital Media Program	Radtke	Color Design	5		X	
E / Digital Media Program	Hofmann	Computer Graphics	7		X	
E / Digital Media Program	Radtke	E-Learning	8		X	
E / Digital Media Program	Gaida	Photography	7		X	
E / Digital Media Program	Gerbaulet	Interaction Design 2	5		X	
E / Digital Media Program	Radtke	Typography	5		X	
E / Digital Media Program	Radtke	2D-Animation	5	X		
E / Digital Media Program	Radtke	Type in Motion/Signs Go Global	5		X	
E / Digital Media Program	Lunde	Programming 1 Programming 2	5 5	X	X	

C) Master-Level Courses taught in English

Department / Study Program	Lecturer	Title	ECTS credits	Fall Semester (October - February)	Spring Semester (March - July)
I / Master Intelligent Systems https://studium.hs-ulm.de/en/Pages/Studiengang_IS.aspx?SearchCategory=Master;	Complete M. Sc Program is offered in English		90	X	X
T / Medical Devices - Research and Development https://studium.hs-ulm.de/de/Seiten/Studiengang_MMD.aspx?SearchCategory=Master;	Complete M. Eng. Program is offered in English		90	X	X
E / Master SYE and SYE intl. resp.	Hartmann / Weiss	Numerical Optimization	6		X
E / Master SYE and SYE intl. resp.	Mantz / Moisel	Physical Methods	6		X
E / Master SYE and SYE intl. resp.	Bank / Commerell	Modeling of Technical Systems	6		X
E / Master SYE and SYE intl. resp.	Bank	Model-Based Systems Development	6		X
E / Master SYE and SYE intl. resp.	M. von Schwerin / Schlick	Embedded Systems	6		X
P / Master SY Logistics	Baumgärtel	Supply Network Performance Management	5	X	
P / Master SY Logistics	Baumgärtel	Quantitative Planning Methods	5		X
G / Institute of foreign Language and Management	Dippe	International Business (Master-Program)	5	X	X

D) German Language courses

Department	Title	ECTS	Fall Semester	Spring Semester
G / Institute of foreign Language and Management (IFM)	German for Beginners 1 - Intensive Course September	2	X	
G / Institute of foreign Language and Management (IFM)	Ankommen in Deutschland – Language and Culture (Previous knowledge of A2 required) Intensive Course September	2	X	
G / Institute of foreign Language and Management (IFM)	German for Beginners 1 - Intensive Course March	2		X
G / Institute of foreign Language and Management (IFM)	Ankommen in Deutschland Intensive Course March	2		X
G / Institute of foreign Language and Management (IFM)	German Beginners Level 1	2	X	X
G / Institute of foreign Language and Management (IFM)	German Beginners Level 2	3	X	X
G / Institute of foreign Language and Management (IFM)	German Beginners Level 3	5	X	X
G / Institute of foreign Language and Management (IFM)	German Beginners Level 4	5	X	X
G / Institute of foreign Language and Management (IFM)	German intermediate Level 1	5	X	X
G / Institute of foreign Language and Management (IFM)	German intermediate Level 2	5	X	X