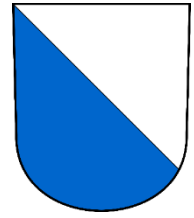




# Zurich University of Applied Sciences School of Engineering



**The ZHAW - School of Engineering offers numerous English taught modules for Incoming Exchange Students - some remarks for clarification:**

- **For Bachelor Exchange students**, in this document the modules open for the fall semester are listed.
- Marked in blue, is a suggested set of modules you do not encounter any conflicts in schedule.
- This list is subject to changes.
- The exchange students can choose modules out of all programs.
- Students who have German language skills level B2, can of course attend all modules.  
<https://www.zhaw.ch/de/engineering/studium/bachelorstudium/>
- **For Master Exchange students**, the program is entirely taught in English. ZHAW School of Engineering offers the following eleven master profiles: Aviation, Business Engineering, Civil Engineering, Computer Science, Data Science, Electrical Engineering, Energy and Environment, Mechanical Engineering, Mechatronics and Automation, Medical Engineering, Photonics.
- Detailed information is available under <https://www.zhaw.ch/en/engineering/study/masters-degree-programme/profiles/>

If you need any further information, please feel free to contact:  
ZHAW School of Engineering Exchange [exchange.engineering@zhaw.ch](mailto:exchange.engineering@zhaw.ch)



# Aviation

## Modules in English for Bachelor Exchange Students Fall Semester Study year 2021-2022

Modules / Courses	Module Code	ECTS Credits	Term	Level
Aircraft Systems - Structure and Mechanical Systems	<a href="#">t.BA.AV.ACSYS-SM-EN.19HS</a>	4	Fall	3. semester
Human Factors	<a href="#">t.BA.AV.HF-EN.19HS</a>	4	Fall	3. semester
Physics 3: Atmospheric Physics and Applied Meteorology	<a href="#">t.BA.AVP.PHYMET-EN.19HS</a>	4	Fall	3. semester
Maintenance, Airworthiness Management, Regulations and Operator Organisation	<a href="#">t.BA.WV.MARO-EN.20HS</a>	4	Fall	5. semester
Numerical and Experimental Aerodynamics	<a href="#">t.BA.WV.NEA-EN.19HS</a>	4	Fall	5. semester
Systems Reliability, Availability, Maintainability and Safety	<a href="#">t.BA.WV.RAMS-EN.19HS</a>	4	Fall	5. semester
Project Thesis: Aviation	<a href="#">t.BA.AV.PA-EN.19HS</a>	6	Fall	5. semester
Aircraft Systems - Control Systems	<a href="#">t.BA.WV.ACSYS-CS-EN.19HS</a>	4	Fall	5. semester
Advanced Mechanics	<a href="#">t.BA.WV.ADV-MECH-EN.19HS</a>	4	Fall	5. semester
Flight Operations	<a href="#">t.BA.WV.FL-OPS-EN.19HS</a>	4	Fall	5. semester
<i>Total Credits</i>		42		

**Summer Schools – Restricted places available.** Please contact Christoph Regli ([christoph.regli@zhaw.ch](mailto:christoph.regli@zhaw.ch)) to check options and requirements once accepted for the exchange semester:

ATM Summer School	<a href="#">t.BA.WV.ATMSS-EN.19HS</a>	4	During the summer semester break
Flight Test Laboratory Summer School	<a href="#">t.BA.WV.FTL-EN.19HS</a>	4	During the summer semester break

### Options from other Engineering Programs

*due to the structure of the curriculum, you can only choose one module from this group*

Digital Assistive Technologies	<a href="#">t.BA.WM.DAST-EN.19HS</a>	4	Fall	5. semester
Digital Health	<a href="#">t.BA.WM.DHEAL-EN.19HS</a>	4	Fall	5. semester
Introduction to Computer and Communication Security	<a href="#">t.BA.WM.INCSEC-EN.19HS</a>	4	Fall	5. semester
Rapid Software Prototyping for Engineering Science	<a href="#">t.BA.WM.RASOP-EN.19HS</a>	4	Fall	5. semester
Safety and Systems Engineering	<a href="#">t.BA.WM.SASEN-EN.19HS</a>	4	Fall	5. semester

### Context modules

Bionics	<a href="#">t.BA.WVK.BION-EN.20HS</a>	2	Fall
German for Beginners	<a href="#">t.BA.XX.GFB.17HS</a>	2	* Fall
Introductions to Swiss Society and Politics	<a href="#">t.BA.XX.ISSP-EN.20HS</a>	2	* Fall
<i>Total Context Modules_ availability depending on number of students</i>		8	

\* availability depending on number of students

# Computer Science

## Modules in English for Bachelor Exchange Students Fall Semester Study year 2021-2022

Modules / Courses	Module Code	ECTS Credits	Term	Level
Cloud Computing 1	<a href="#">t.BA.WV.CCP1-EN.19HS</a>	4	Fall	5. semester
Software and System Security 1	<a href="#">t.BA.WV.SWS1-EN.19HS</a>	4	Fall	5. semester
Artificial Intelligence 1 Starts at KW37	<a href="#">t.BA.WV.AI1-EN.19HS</a>	4	Fall	5. semester
Internet of Things 1	<a href="#">t.BA.WV.IOT1-EN.19HS</a>	4	Fall	5. semester
Communication Networks and Services 1	<a href="#">t.BA.WV.CNS1-EN.19HS</a>	4	Fall	5. semester
Scientific Computing	<a href="#">t.BA.WV.SCC-EN.19HS</a>	4	Fall	5. semester
Project Thesis: Computer Science	<a href="#">t.BA.IT.PA-EN.19HS</a>	6	Fall	5. semester
System on Chip Design	<a href="#">t.BA.WV.SCD-EN.19HS</a>	4	Fall	5. semester
Serverless and Cloud Application Development	<a href="#">t.BA.WV.SCAD-EN.20HS</a>	4	Fall	5. semester
Digital Image Processing 1	<a href="#">t.BA.WV.DIP-EN.19HS</a>	4	Fall	5. semester
<i>Total Credits</i>		42		

### Options from other Engineering Programs

*due to the structure of the curriculum, you can only choose one module from this group*

Digital Assistive Technologies	<a href="#">t.BA.WM.DAST-EN.19HS</a>	4	Fall	5. semester
Digital Health	<a href="#">t.BA.WM.DHEAL-EN.19HS</a>	4	Fall	5. semester
Introduction to Computer and Communication Security	<a href="#">t.BA.WM.INCSEC-EN.19HS</a>	4	Fall	5. semester
Rapid Software Prototyping for Engineering Science	<a href="#">t.BA.WM.RASOP-EN.19HS</a>	4	Fall	5. semester
Safety and Systems Engineering	<a href="#">t.BA.WM.SASEN-EN.19HS</a>	4	Fall	5. semester

### Context modules

Bionics	<a href="#">t.BA.WVK.BION-EN.20HS</a>	2	Fall	
German for Beginners	<a href="#">t.BA.XX.GFB.17HS</a>	2	* Fall	
Introductions to Swiss Society and Politics	<a href="#">t.BA.XX.ISSP-EN.20HS</a>	2	* Fall	
<i>Total Context Modules_ availability depending on number of students</i>		8		

\* availability depending on number of students

# Electrical Engineering

## Modules in English for Bachelor Exchange Students Fall Semester Study year 2021-2022

Modules / Courses	Module Code	ECTS Credits	Term	Level
Digital Image Processing 1	<a href="#">t.BA.WV.DIP-EN.19HS</a>	4	Fall	5. semester
Internet of Things 1	<a href="#">t.BA.WV.IOT1-EN.19HS</a>	4	Fall	5. semester
System on Chip Design	<a href="#">t.BA.WV.SCD-EN.19HS</a>	4	Fall	5. semester
Communication Networks and Services 1	<a href="#">t.BA.WV.CNS1-EN.19HS</a>	4	Fall	5. semester
Project Thesis: Electrical Engineering	<a href="#">t.BA.ET.PA-EN.19HS</a>	6	Fall	5. semester
Automation 1	<a href="#">t.BA.WV.AUT1-EN.19HS</a>	4	Fall	5. semester
Electronics Project 1	<a href="#">t.BA.ET.PM3-EN.19HS</a>	4	Fall	3. semester
Computer Engineering 1	<a href="#">t.BA.XX.CT1-EN.13HS</a>	4	Fall	3. semester
Signals and Systems 1	<a href="#">t.BA.XX.SISY1-EN.13HS</a>	4	Fall	3. semester
<i>Total Credits</i>		38		

### Options from other Engineering Programs

*due to the structure of the curriculum, you can only choose one module from this group*

Digital Assistive Technologies	<a href="#">t.BA.WM.DAST-EN.19HS</a>	4	Fall	5. semester
Digital Health	<a href="#">t.BA.WM.DHEAL-EN.19HS</a>	4	Fall	5. semester
Introduction to Computer and Communication Security	<a href="#">t.BA.WM.INCSEC-EN.19HS</a>	4	Fall	5. semester
Rapid Software Prototyping for Engineering Science	<a href="#">t.BA.WM.RASOP-EN.19HS</a>	4	Fall	5. semester
Safety and Systems Engineering	<a href="#">t.BA.WM.SASEN-EN.19HS</a>	4	Fall	5. semester

### Context modules

Bionics	<a href="#">t.BA.WVK.BION-EN.20HS</a>	2	Fall
German for Beginners	<a href="#">t.BA.XX.GFB.17HS</a>	2	* Fall
Introductions to Swiss Society and Politics	<a href="#">t.BA.XX.ISSP-EN.20HS</a>	2	* Fall
<i>Total Context Modules_ availability depending on number of students</i>		8	

\* availability depending on number of students

# Engineering and Management

## Modules in English for Bachelor Exchange Students Fall Semester Study year 2021-2022

Modules / Courses	Module Code	ECTS Credits	Term	Level
Financial Enterprise Modeling	<a href="#">t.BA.WI.FUM-EN.19HS</a>	4	Fall	3. semester
Probability and Statistics 3	<a href="#">t.BA.WI.WAST3-EN.19HS</a>	4	Fall	3. semester
Physics 3: Factory Physics	<a href="#">t.BA.WIP.FAP-EN.19HS</a>	4	Fall	3. semester
Advanced Regression Modelling	<a href="#">t.BA.WV.ARM-EN.19HS</a>	4	Fall	5. semester
Databases	<a href="#">t.BA.WV.DB-EN.19HS</a>	4	Fall	5. semester
Service Engineering Basics	<a href="#">t.BA.WV.SEG-EN.19HS</a>	4	Fall	5. semester
Simulation of Business Processes	<a href="#">t.BA.WV.SIM-EN.19HS</a>	4	Fall	5. semester
Project Thesis: Engineering and Management	<a href="#">t.BA.WI.PA-EN.19HS</a>	6	Fall	5. semester
<i>Total Credits</i>		34		

### Options from other Engineering Programs

*due to the structure of the curriculum, you can only choose one module from this group*

Digital Assistive Technologies	<a href="#">t.BA.WM.DAST-EN.19HS</a>	4	Fall	5. semester
Digital Health	<a href="#">t.BA.WM.DHEAL-EN.19HS</a>	4	Fall	5. semester
Introduction to Computer and Communication Security	<a href="#">t.BA.WM.INCSEC-EN.19HS</a>	4	Fall	5. semester
Rapid Software Prototyping for Engineering Science	<a href="#">t.BA.WM.RASOP-EN.19HS</a>	4	Fall	5. semester
Safety and Systems Engineering	<a href="#">t.BA.WM.SASEN-EN.19HS</a>	4	Fall	5. semester

### Context modules

Bionics	<a href="#">t.BA.WVK.BION-EN.20HS</a>	2	Fall	
German for Beginners	<a href="#">t.BA.XX.GFB.17HS</a>	2	* Fall	
Introductions to Swiss Society and Politics	<a href="#">t.BA.XX.ISSP-EN.20HS</a>	2	* Fall	
<i>Total Context Modules_ availability depending on number of students</i>		8		

\* availability depending on number of students

# Mechanical Engineering

## Modules in English for Bachelor Exchange Students Fall Semester Study year 2021-2022

Modules / Courses	Module Code	ECTS Credits	Term	Level
Thermodynamics	<a href="#">t.BA.XX.FTH2-EN.19HS</a>	4	Fall	3. semester
Mechanical Vibrations	<a href="#">t.BA.MT.MDYN-EN.19HS</a>	4	Fall	5. semester
Smart Products and Production 1	<a href="#">t.BA.WV.SPP1-EN.19HS</a>	4	Fall	5. semester
Systems and Automation Technology 1	<a href="#">t.BA.WV.SYAT1-EN.19HS</a>	4	Fall	5. semester
Numerical and Experimental Aerodynamics	<a href="#">t.BA.WV.NEA-EN.19HS</a>	4	Fall	5. semester
Additive Manufacturing (3D printing)	<a href="#">t.BA.WV.AFV-EN.19HS</a>	4	Fall	5. semester
Project Thesis: Mechanical Engineering	<a href="#">t.BA.MT.PA-EN.19HS</a>	6	Fall	5. semester
Measurement and Control Systems 1	<a href="#">t.BA.MT.MRT1-EN.19HS</a>	2	Fall	3. semester
Industrial Design: Basic Principles	<a href="#">t.BA.WV.INDE-EN.19HS</a>	4	Fall	5. Semester
<i>Total Credits</i>		36		

### Options from other Engineering Programs

*due to the structure of the curriculum, you can only choose one module from this group*

Digital Assistive Technologies	<a href="#">t.BA.WM.DAST-EN.19HS</a>	4	Fall	5. semester
Digital Health	<a href="#">t.BA.WM.DHEAL-EN.19HS</a>	4	Fall	5. semester
Introduction to Computer and Communication Security	<a href="#">t.BA.WM.INCSEC-EN.19HS</a>	4	Fall	5. semester
Rapid Software Prototyping for Engineering Science	<a href="#">t.BA.WM.RASOP-EN.19HS</a>	4	Fall	5. semester
Safety and Systems Engineering	<a href="#">t.BA.WM.SASEN-EN.19HS</a>	4	Fall	5. semester

### Context modules

Bionics	<a href="#">t.BA.WVK.BION-EN.20HS</a>	2	Fall	
German for Beginners	<a href="#">t.BA.XX.GFB.17HS</a>	2	* Fall	
Introductions to Swiss Society and Politics	<a href="#">t.BA.XX.ISSP-EN.20HS</a>	2	* Fall	
<i>Total Context Modules_ availability depending on number of students</i>		8		

\* availability depending on number of students

# System Engineering

## Modules in English for Bachelor Exchange Students Fall Semester Study year 2021-2022

Modules / Courses	Module Code	ECTS Credits	Term	Level
Product Development for Systems Engineering 3	<a href="#">t.BA.ST.PM3-EN.19HS</a>	4	Fall	3. semester
Computer Engineering 1	<a href="#">t.BA.XX.CT1-EN.13HS</a>	4	Fall	3. semester
Signals and Systems 1	<a href="#">t.BA.XX.SISY1-EN.13HS</a>	4	Fall	3. semester
System on Chip Design	<a href="#">t.BA.WV.SCD-EN.19HS</a>	4	Fall	5. semester
Automation 1	<a href="#">t.BA.WV.AUT1-EN.19HS</a>	4	Fall	5. semester
Industrial Design: Basic Principles	<a href="#">t.BA.WV.INDE-EN.19HS</a>	4	Fall	5. semester
Project Thesis: Systems Engineering	<a href="#">t.BA.ST.PA-EN.19HS</a>	6	Fall	5. semester
Additive Manufacturing (3D printing)	<a href="#">t.BA.WV.AFV-EN.19HS</a>	4	Fall	5. semester
Digital Image Processing 1	<a href="#">t.BA.WV.DIP-EN.19HS</a>	4	Fall	5. semester
<i>Total Credits</i>		38		

### Options from other Engineering Programs

*due to the structure of the curriculum, you can only choose one module from this group*

Digital Assistive Technologies	<a href="#">t.BA.WM.DAST-EN.19HS</a>	4	Fall	5. semester
Digital Health	<a href="#">t.BA.WM.DHEAL-EN.19HS</a>	4	Fall	5. semester
Introduction to Computer and Communication Security	<a href="#">t.BA.WM.INCSEC-EN.19HS</a>	4	Fall	5. semester
Rapid Software Prototyping for Engineering Science	<a href="#">t.BA.WM.RASOP-EN.19HS</a>	4	Fall	5. semester
Safety and Systems Engineering	<a href="#">t.BA.WM.SASEN-EN.19HS</a>	4	Fall	5. semester

### Context modules

Bionics	<a href="#">t.BA.WVK.BION-EN.20HS</a>	2	Fall	
German for Beginners	<a href="#">t.BA.XX.GFB.17HS</a>	2	* Fall	
Introductions to Swiss Society and Politics	<a href="#">t.BA.XX.ISSP-EN.20HS</a>	2	* Fall	
<i>Total Context Modules_ availability depending on number of students</i>		8		

\* availability depending on number of students

# Energy and Environmental Engineering

## Modules in English for Bachelor Exchange Students Fall Semester Study year 2021-2022

Modules / Courses	Module Code	ECTS Credits	Term	Level
Project Thesis: Energy and Environmental Engineering	<a href="#">t.BA.EU.PA-EN.19HS</a>	6	Fall	5. semester
<i>Total Credits</i>		6		

### Options from other Engineering Programs

*due to the structure of the curriculum, you can only choose one module from this group*

Digital Assistive Technologies	<a href="#">t.BA.WM.DAST-EN.19HS</a>	4	Fall	5. semester
Digital Health	<a href="#">t.BA.WM.DHEAL-EN.19HS</a>	4	Fall	5. semester
Introduction to Computer and Communication Security	<a href="#">t.BA.WM.INCSEC-EN.19HS</a>	4	Fall	5. semester
Rapid Software Prototyping for Engineering Science	<a href="#">t.BA.WM.RASOP-EN.19HS</a>	4	Fall	5. semester
Safety and Systems Engineering	<a href="#">t.BA.WM.SASEN-EN.19HS</a>	4	Fall	5. semester

### Context modules

Bionics	<a href="#">t.BA.WVK.BION-EN.20HS</a>	2	Fall	
German for Beginners	<a href="#">t.BA.XX.GFB.17HS</a>	2	* Fall	
Introductions to Swiss Society and Politics	<a href="#">t.BA.XX.ISSP-EN.20HS</a>	2	* Fall	
<i>Total Context Modules_ availability depending on number of students</i>		8		

\* availability depending on number of students



# Transport Systems

Modules in English for Bachelor Exchange Students  
Fall Semester Study year 2021-2022

Modules / Courses	Module Code	ECTS Credits	Term	Level
Project Thesis: Transport systems	<a href="#">t.BA.VS.PA-EN.19HS</a>	6	Fall	5. semester
<i>Total Credits</i>		6		

## Options from other Engineering Programs

*due to the structure of the curriculum, you can only choose one module from this group*

Digital Assistive Technologies	<a href="#">t.BA.WM.DAST-EN.19HS</a>	4	Fall	5. semester
Digital Health	<a href="#">t.BA.WM.DHEAL-EN.19HS</a>	4	Fall	5. semester
Introduction to Computer and Communication Security	<a href="#">t.BA.WM.INCSEC-EN.19HS</a>	4	Fall	5. semester
Rapid Software Prototyping for Engineering Science	<a href="#">t.BA.WM.RASOP-EN.19HS</a>	4	Fall	5. semester
Safety and Systems Engineering	<a href="#">t.BA.WM.SASEN-EN.19HS</a>	4	Fall	5. semester

## Context modules

Bionics	<a href="#">t.BA.WVK.BION-EN.20HS</a>	2	** Fall
German for Beginners	<a href="#">t.BA.XX.GFB.17HS</a>	2	* Fall
Introductions to Swiss Society and Politics	<a href="#">t.BA.XX.ISSP-EN.20HS</a>	2	* Fall
<i>Total Context Modules_ availability depending on number of students</i>		8	

\* availability depending on number of students

\*\* elective courses: availability for next study year will be published in May