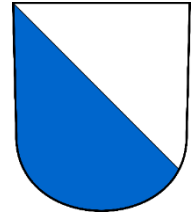




Zurich University of Applied Sciences School of Engineering



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. 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



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	t.BA.AV.ACSYS-SM-EN.19HS	4	Fall	3. semester
Human Factors	t.BA.AV.HF-EN.19HS	4	Fall	3. semester
Physics 3: Atmospheric Physics and Applied Meteorology	t.BA.AVP.PHYMET-EN.19HS	4	Fall	3. semester
Maintenance, Airworthiness Management, Regulations and Operator Organisation	t.BA.WV.MARO-EN.20HS	4	Fall	5. semester
Numerical and Experimental Aerodynamics	t.BA.WV.NEA-EN.19HS	4	Fall	5. semester
Project / Thesis: Aviation	t.BA.AV.PA-EN.19HS	6	Fall	5. semester
Aircraft Systems - Control Systems	t.BA.WV.ACSYS-CS-EN.19HS	4	Fall	5. semester
Advanced Mechanics	t.BA.WV.ADV-MECH-EN.19HS	4	Fall	5. semester
Flight Operations	t.BA.WV.FL-OPS-EN.19HS	4	Fall	5. semester
Systems Reliability, Availability, Maintainability and Safety	t.BA.WV.RAMS-EN.19HS	4	Fall	5. semester
Total Credits		42		

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

ATM Summer School	t.BA.WV.ATMSS-EN.19HS	4	During the summer semester break
Flight Test Laboratory Summer School	t.BA.WV.FTL-EN.19HS	4	During the summer semester break

Options from other Engineering Programs

Digital Assistive Technologies	t.BA.WM.DAST-EN.19HS	4	Fall
Digital Health	t.BA.WM.DHEAL-EN.19HS	4	Fall
Introduction to Computer and Communication Security	t.BA.WM.INCSEC-EN.19HS	4	Fall
International Management - Asia	t.BA.WM.INTMAN-EN.19HS	4	Fall
Principles and Applications of the IoT	t.BA.WM.PRIAP-EN.19HS	4	Fall
Rapid Software Prototyping for Engineering Science	t.BA.WM.RASOP-EN.19HS	4	Fall
Safety and Systems Engineering	t.BA.WM.SASEN-EN.19HS	4	Fall
Total Credits from other Programs		28	

Context modules

Bionics	t.BA.WVK.BION-EN.20HS	2	Fall
German for Beginners	t.BA.XX.GFB.18HS	2	Fall
Introductions to Swiss Society and Politics	t.BA.XX.ISSP-EN.18HS	2	Fall
Intercultural Communication and Management	t.BA.XXK.ICAM-EN.19HS	2	Fall
Total Context Modules		8	

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	t.BA.WV.CCP1-EN.19HS	4	Fall	5. semester
Software and System Security 1	t.BA.WV.SWS1-EN.19HS	4	Fall	5. semester
Artificial Intelligence 1 Starts at KW 47	t.BA.WV.KI1.19HS	4	Fall	5. semester
Internet of Things 1	t.BA.WV.IOT1-EN.19HS	4	Fall	5. semester
Communication Networks and Services 1	t.BA.WV.CNS1-EN.19HS	4	Fall	5. semester
Scientific Computing	t.BA.WV.SCC-EN.19HS	4	Fall	5. semester
Project Thesis: Computer Science	t.BA.IT.PA-EN.19HS	6	Fall	5. semester
System on Chip Design	t.BA.WV.SCD-EN.19HS	4	Fall	5. semester
Serverless and Cloud Application Development	t.BA.WV.SCAD-EN.20HS	4	Fall	5. semester
Digital Image Processing 1	t.BA.WV.DIP-EN.19HS	4	Fall	5. semester
<i>Total Credits</i>		42		

Options from other Engineering Programs

Digital Assistive Technologies	t.BA.WM.DAST-EN.19HS	4	Fall
Digital Health	t.BA.WM.DHEAL-EN.19HS	4	Fall
Introduction to Computer and Communication Security	t.BA.WM.INCSEC-EN.19HS	4	Fall
International Management - Asia	t.BA.WM.INTMAN-EN.19HS	4	Fall
Principles and Applications of the IoT	t.BA.WM.PRIAP-EN.19HS	4	Fall
Rapid Software Prototyping for Engineering Science	t.BA.WM.RASOP-EN.19HS	4	Fall
Safety and Systems Engineering	t.BA.WM.SASEN-EN.19HS	4	Fall
<i>Total Credits from other Programs</i>		28	

Context modules

Bionics	t.BA.WVK.BION-EN.20HS	2	Fall
German for Beginners	t.BA.XX.GFB.18HS	2	Fall
Introductions to Swiss Society and Politics	t.BA.XX.ISSP-EN.18HS	2	Fall
Intercultural Communication and Management	t.BA.XXK.ICAM-EN.19HS	2	Fall
<i>Total Context Modules</i>		8	

Mechanical Engineering

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

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

Options from other Engineering Programs

Digital Assistive Technologies	t.BA.WM.DAST-EN.19HS	4	Fall
Digital Health	t.BA.WM.DHEAL-EN.19HS	4	Fall
Introduction to Computer and Communication Security	t.BA.WM.INCSEC-EN.19HS	4	Fall
International Management - Asia	t.BA.WM.INTMAN-EN.19HS	4	Fall
Principles and Applications of the IoT	t.BA.WM.PRIAP-EN.19HS	4	Fall
Rapid Software Prototyping for Engineering Science	t.BA.WM.RASOP-EN.19HS	4	Fall
Safety and Systems Engineering	t.BA.WM.SASEN-EN.19HS	4	Fall
<i>Total Credits from other Programs</i>		28	

Context modules

Bionics	t.BA.WVK.BION-EN.20HS	2	Fall
German for Beginners	t.BA.XX.GFB.18HS	2	Fall
Introductions to Swiss Society and Politics	t.BA.XX.ISSP-EN.18HS	2	Fall
Intercultural Communication and Management	t.BA.XXK.ICAM-EN.19HS	2	Fall
<i>Total Context Modules</i>		8	

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	t.BA.WI.FUM-EN.19HS	4	Fall	3. semester
Probability and Statistics 3	t.BA.WI.WAST3-EN.19HS	4	Fall	3. semester
Physics 3: Factory Physics	t.BA.WIP.FAP-EN.19HS	4	Fall	3. semester
Basics of Statistics	t.BA.XX.GSTAT-EN.20HS	4	Fall	3. semester
Project Thesis: Engineering and Management	t.BA.WI.PA-EN.19HS	6	Fall	5. semester
Advanced Regression Modelling	t.BA.WV.ARM-EN.19HS	4	Fall	5. semester
Databases	t.BA.WV.DB-EN.19HS	4	Fall	5. semester
Service Engineering Basics	t.BA.WV.SEG-EN.19HS	4	Fall	5. semester
Simulation of Business Processes	t.BA.WV.SIM-EN.19HS	4	Fall	5. semester
<i>Total Credits</i>		38		

Options from other Engineering Programs

Digital Assistive Technologies	t.BA.WM.DAST-EN.19HS	4	Fall
Digital Health	t.BA.WM.DHEAL-EN.19HS	4	Fall
Introduction to Computer and Communication Security	t.BA.WM.INCSEC-EN.19HS	4	Fall
International Management - Asia	t.BA.WM.INTMAN-EN.19HS	4	Fall
Principles and Applications of the IoT	t.BA.WM.PRIAP-EN.19HS	4	Fall
Rapid Software Prototyping for Engineering Science	t.BA.WM.RASOP-EN.19HS	4	Fall
Safety and Systems Engineering	t.BA.WM.SASEN-EN.19HS	4	Fall
<i>Total Credits from other Programs</i>		28	

Context modules

Bionics	t.BA.WVK.BION-EN.20HS	2	Fall
German for Beginners	t.BA.XX.GFB.18HS	2	Fall
Introductions to Swiss Society and Politics	t.BA.XX.ISSP-EN.18HS	2	Fall
Intercultural Communication and Management	t.BA.XXK.ICAM-EN.19HS	2	Fall
<i>Total Context Modules</i>		8	

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	t.BA.ST.PM3-EN.19HS	4	Fall	3. semester
Computer Engineering 1	t.BA.XX.CT1-EN.13HS	4	Fall	3. semester
Signals and Systems 1	t.BA.XX.SISY1-EN.13HS	4	Fall	3. semester
System on Chip Design	t.BA.WV.SCD-EN.19HS	4	Fall	5. semester
Automation 1	t.BA.WV.AUT1-EN.19HS	4	Fall	5. semester
Industrial Design: Basic Principles	t.BA.WV.INDE-EN.19HS	4	Fall	5. semester
Digital Image Processing 1	t.BA.WV.DIP-EN.19HS	4	Fall	5. semester
Project Thesis: Systems Engineering	t.BA.ST.PA-EN.19HS	6	Fall	5. semester
Additive Manufacturing (3D printing)	t.BA.WV.AFV-EN.19HS	4	Fall	5. semester
<i>Total Credits</i>		38		

Options from other Engineering Programs

Digital Assistive Technologies	t.BA.WM.DAST-EN.19HS	4	Fall
Digital Health	t.BA.WM.DHEAL-EN.19HS	4	Fall
Introduction to Computer and Communication Security	t.BA.WM.INCSEC-EN.19HS	4	Fall
International Management - Asia	t.BA.WM.INTMAN-EN.19HS	4	Fall
Principles and Applications of the IoT	t.BA.WM.PRIAP-EN.19HS	4	Fall
Rapid Software Prototyping for Engineering Science	t.BA.WM.RASOP-EN.19HS	4	Fall
Safety and Systems Engineering	t.BA.WM.SASEN-EN.19HS	4	Fall
<i>Total Credits from other Programs</i>		28	

Context modules

Bionics	t.BA.WVK.BION-EN.20HS	2	Fall
German for Beginners	t.BA.XX.GFB.18HS	2	Fall
Introductions to Swiss Society and Politics	t.BA.XX.ISSP-EN.18HS	2	Fall
Intercultural Communication and Management	t.BA.XXK.ICAM-EN.19HS	2	Fall
<i>Total Context Modules</i>		8	

Electrical Engineering

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

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

Options from other Engineering Programs

Digital Assistive Technologies	t.BA.WM.DAST-EN.19HS	4	Fall
Digital Health	t.BA.WM.DHEAL-EN.19HS	4	Fall
Introduction to Computer and Communication Security	t.BA.WM.INCSEC-EN.19HS	4	Fall
International Management - Asia	t.BA.WM.INTMAN-EN.19HS	4	Fall
Principles and Applications of the IoT	t.BA.WM.PRIAP-EN.19HS	4	Fall
Rapid Software Prototyping for Engineering Science	t.BA.WM.RASOP-EN.19HS	4	Fall
Safety and Systems Engineering	t.BA.WM.SASEN-EN.19HS	4	Fall
<i>Total Credits from other Programs</i>		28	

Context modules

Bionics	t.BA.WVK.BION-EN.20HS	2	Fall
German for Beginners	t.BA.XX.GFB.18HS	2	Fall
Introductions to Swiss Society and Politics	t.BA.XX.ISSP-EN.18HS	2	Fall
Intercultural Communication and Management	t.BA.XXK.ICAM-EN.19HS	2	Fall
<i>Total Context Modules</i>		8	

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	t.BA.EU.PA-EN.19HS	6	Fall	5. semester
<i>Total Credits</i>		6		

Options from other Engineering Programs

Digital Assistive Technologies	t.BA.WM.DAST-EN.19HS	4	Fall
Digital Health	t.BA.WM.DHEAL-EN.19HS	4	Fall
Introduction to Computer and Communication Security	t.BA.WM.INCSEC-EN.19HS	4	Fall
International Management - Asia	t.BA.WM.INTMAN-EN.19HS	4	Fall
Principles and Applications of the IoT	t.BA.WM.PRIAP-EN.19HS	4	Fall
Rapid Software Prototyping for Engineering Science	t.BA.WM.RASOP-EN.19HS	4	Fall
Safety and Systems Engineering	t.BA.WM.SASEN-EN.19HS	4	Fall
<i>Total Credits from other Programs</i>		28	

Context modules

Bionics	t.BA.WVK.BION-EN.20HS	2	Fall
German for Beginners	t.BA.XX.GFB.18HS	2	Fall
Introductions to Swiss Society and Politics	t.BA.XX.ISSP-EN.18HS	2	Fall
Intercultural Communication and Management	t.BA.XXK.ICAM-EN.19HS	2	Fall
<i>Total Context Modules</i>		8	

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	t.BA.VS.PA-EN.19HS	6	Fall	5. semester
<i>Total Credits</i>		6		

Options from other Engineering Programs

Digital Assistive Technologies	t.BA.WM.DAST-EN.19HS	4	Fall
Digital Health	t.BA.WM.DHEAL-EN.19HS	4	Fall
Introduction to Computer and Communication Security	t.BA.WM.INCSEC-EN.19HS	4	Fall
International Management - Asia	t.BA.WM.INTMAN-EN.19HS	4	Fall
Principles and Applications of the IoT	t.BA.WM.PRIAP-EN.19HS	4	Fall
Rapid Software Prototyping for Engineering Science	t.BA.WM.RASOP-EN.19HS	4	Fall
Safety and Systems Engineering	t.BA.WM.SASEN-EN.19HS	4	Fall
<i>Total Credits from other Programs</i>		28	

Context modules

Bionics	t.BA.WVK.BION-EN.20HS	2	Fall
German for Beginners	t.BA.XX.GFB.18HS	2	Fall
Introductions to Swiss Society and Politics	t.BA.XX.ISSP-EN.18HS	2	Fall
Intercultural Communication and Management	t.BA.XXK.ICAM-EN.19HS	2	Fall
<i>Total Context Modules</i>		8	