Frankfurt University of Applied Sciences

OUR ENGLISH TAUGHT CLASSES

For Exchange Students | Academic Year 2019/2020

Wissen durch Praxis stärkt

International Office

WINTER SEMESTER › September to February

Important to know: *Orientation Program with German intensive course starts in September, academic courses start in October.
- Please note that all classes are worth 5 ECTS unless noted otherwise.
- Please note the respective graduate program pre-requisites.

HEALTH AND SOCIAL WORK

WINTER SEMESTER

UNDERGRADUATE

■ SOCIAL WORK: TRANSNATIONAL (B.A.)
☐ Development and Implementation of a Small Project (10 ECTS)
☐ Introduction to the Field of Transnational Social Work (10 ECTS)
☐ Methods and Concepts in Transnational Social Settings (10 ECTS)

ARCHITECTURE, CIVIL ENGINEERING AND GEOMATICS

WINTER SEMESTER

UNDERGRADUATE

To learn more about the offered electives please contact **Angelika Plümmer:**
✉ pluemmer@fb1.fra-uas.de

■ ARCHITECTURE (B.A.)
☐ 5th semester Design Studios (10 ECTS)
☐ Elective Courses (5 ECTS each)

■ CIVIL ENGINEERING (B.ENG.)
☐ Individually Tutored Final Year Projects
(2 different half-year-projects, 10 ECTS each)

GRADUATE

■ ADVANCED ARCHITECTURE (M.SC.)
☐ Lecture Series Construction ☐ International Design Project ☐ New Buildings – Design and Construction (10ETCS)
Electives: Rehabilitate, Reuse, Add-on ☐ Urban Renewable and Redevelopment ☐ Structural Design (5 ECTS each).

■ URBAN AGGLOMERATIONS (M.SC.)
☐ Urban Planning and Development (10 ECTS) ☐ Urban Culture and Governance (10 ECTS) ☐ GIS and Remote Sensing (5 ECTS) ☐ Scientific Methods and Academic Skills (2,5 ECTS) ☐ German Language and Communication (2,5 ECTS)

■ DESIGN AND CONSTRUCTION (M.A.)
Every term various courses as well as elective courses are given in English upon prior agreement.

COMPUTER SCIENCE AND ENGINEERING

WINTER SEMESTER

UNDERGRADUATE

■ BIOLOGICAL PROCESS ENGINEERING (B.SC.)
Elective: Special Topics – one-week intensive lecture course (2,5 ETCS) presented by invited professors from international partner universities one week before the start of the lecture period

■ COMPUTER SCIENCE (B.SC.)
☐ Software Engineering – Analysis ☐ Statistics ☐ Object-Oriented-Programming – Java ☐ Databases ☐ Computer Networks (10 ECTS)

■ COMPUTER SCIENCE - MOBILE APPLICATION (B.SC.)
☐ Software Engineering – Analysis ☐ Embedded Intelligent Systems ☐ Object-Oriented Programming – Java ☐ Databases ☐ Computer Networks (10 ECTS)

■ ELECTRICAL ENGINEERING AND COMMUNICATIONS (B.ENG.)
☐ Mobile Communication with Applied Business Administration and Economics ☐ Radio Frequency Engineering ☐ Digital Signals and Systems

■ ELECTRICAL ENGINEERING AND INFORMATION TECHNOLOGY (B.ENG.)
Academic Skills

■ ENERGY EFFICIENCY AND RENEWABLE ENERGIES (B.ENG)
☐ Smart Grids (10 ECTS) ☐ Grid-Tied Inverters for Renewable Energy Storage

■ INFORMATION SYSTEMS TECHNOLOGY (B.ENG.)
☐ Robotics and Autonomous Systems

■ MECHATRONICS (B.ENG.) ☐ Microcontroller Technology

■ MECHANICAL ENGINEERING (B.ENG.) ☐ CNC Machine Tools

GRADUATE

■ HIGH INTEGRITY SYSTEMS (M.SC.)
☐ Advanced Formal Modelling ☐ Introductory Data Analysis ☐ Implementation of DBMS ☐ Safety Critical Computer Systems ☐ Mathematics Update ☐ Formal Specification and Verification ☐ HIS Project(10 ECTS)
Electives: Advanced Real-Time Systems ☐ Machine Learning ☐ Pattern Oriented Software Architecture ☐ Quantum Information Science ☐ Internet of Things ☐ Multivariate Data Analysis ☐ Simulation Methods ☐ Artificial Intelligence ☐ Standards and Certification ☐ Current Topics in High Integrity Systems ☐ Selected Subjects in Current Web Engineering ☐ Mobile Systems and Applications ☐ Cloud Computing

■ INFORMATION TECHNOLOGY (M.ENG.)
☐ Circuit Design for Communication Systems ☐ Software Engineering ☐ Image Processing and Identification of Dynamic Systems ☐ IT-Security ☐ Cultural Diversity and Business Ethics ☐ Mobile Computing ☐ Computational Intelligence

■ MECHATRONIC AND ROBOTIC (M.SC.)
☐ Autonomous Intelligent Systems ☐ Computational Intelligence

BUSINESS & LAW

WINTER SEMESTER

UNDERGRADUATE

■ INTERNATIONAL BUSINESS ADMINISTRATION (B.A.)
☐ Marketing, Logistics and Production ☐ Financial and Management Accounting III ☐ Statistics for Business ☐ Macroeconomics ☐ Business Information Systems II ☐ Cultural Diversity ☐ European and International Business Law ☐ International Economics ☐ International Marketing ☐ Transport, Geography and International Trade ☐ International Finance ☐ Business Ethics

■ INTERNATIONAL FINANCE (B.SC.)
☐ Comparative Banking ☐ Accounting for Finance ☐ Multinational Finance ☐ International Taxation ☐ Monetary Economics and ECB Watching* ☐ Computer Based Investment Analysis* ☐ International Accounting ☐ Risk Management* ☐ Multinational Corporate Finance

■ TOURISM MANAGEMENT (B.A.)
☐ Business English ☐ Macroeconomics ☐ Marketing ☐ Finance and Investment ☐ Controlling

■ AVIATION MANAGEMENT (B.A.)
☐ Business English ☐ Macroeconomics ☐ Marketing ☐ Finance and Investment ☐ Controlling

GRADUATE

■ ACCOUNTING AND FINANCE (M.SC.)
☐ Financial Economics ☐ Financial Reporting and Capital Markets ☐ Digital Finance and Investment Analysis

■ GLOBAL LOGISTICS (M.SC.)
☐ Selected Topics in Corporate Logistics ☐ Hub Logistics and Transport Logistics ☐ Selected Topics in Logistics and Economics ☐ It-Based Process Management with ERP-Systems ☐ International Trade and International Business Law ☐ Empirical and Quantitative Methods ☐ Simulation in Logistics

■ LEADERSHIP (M.A.)
☐ International Strategic Management ☐ Research Methods ☐ Boundaryless Leadership

■ STRATEGIC INFORMATION MANAGEMENT (M.SC.)
☐ Research Methods ☐ Data Science and Information Retrieval ☐ Applied Artificial Intelligence ☐ Data Management Analysis and Reporting ☐ International Strategic Management ☐ Boundaryless Leadership

*please only select this module if you fulfill all pre-requisites

SUMMER SEMESTER › March to July

Important to know: *Orientation Program with German intensive course starts in March, academic courses start in April.

- Please note that all classes are worth 5 ECTS unless noted otherwise.
- Please note the respective graduate program pre-requisites.

UNDERGRADUATE

SOCIAL WORK: TRANSNATIONAL (B.A.)
- ☐ Development and Implementation of a Small Project (10 ECTS)
- ☐ Introduction to the Field of Transnational Social Work (10 ECTS)
- ☐ Methods and Concepts in Transnational Social Settings (10 ECTS)

UNDERGRADUATE

To learn more about the offered electives please contact **Angelika Plümmer:**
✉ pluemmer@fb1.fra-uas.de

ARCHITECTURE (B.A.)
- ☐ 5th semester Design Studios (10 ECTS)
- ☐ Elective Courses (5 ECTS each)

CIVIL ENGINEERING (B.ENG.)
- ☐ Individually Tutored Final Year Projects (2 different half-year-projects, 10 ECTS each)

GRADUATE

ADVANCED ARCHITECTURE (M.SC.)
- ☐ Urban Contexts – Design & Construction (10ETCS) ☐ Existing Contexts – Design and Construction (10ETCS) ☐ Lecture Series Design ☐ Impromptu Designs
- **Electives:** ☐ Digital Analog ☐ Experimental Design ☐ Material Design

URBAN AGGLOMERATIONS (M.SC.)
- Interdisciplinary Project Work (10 ECTS) ☐ Urban Infrastructure (10 ECTS) ☐ Urban Ecology and Environment ☐ Scientific Methods and Academic Skills (2,5 ECTS) ☐ German Language and Communication (2,5 ECTS)

DESIGN AND CONSTRUCTION (M.A.)
- Every term various courses in design and construction as well as elective courses are given in English upon prior agreement.

UNDERGRADUATE

BIOLOGICAL PROCESS ENGINEERING (B.ENG.)
- ☐ Biochemistry ☐ Heat and Mass Transfer ☐ Mechanical Process Engineering ☐ Physical Chemistry and Chemical Reaction Engineering ☐ Process Automation **Elective:** Special Topics – one-week intensive lecture course (2,5 ETCS) presented by invited professors from international partner universities one week before the start of the lecture period

COMPUTER SCIENCE (B.SC.)
- ☐ Operating Systems ☐ Software Engineering – Design ☐ Real-time Systems ☐ IT Security ☐ Distributed Systems ☐ Programming Exercises

COMPUTER SCIENCE - MOBILE APPLICATION (B.SC.)
- ☐ Operating Systems ☐ Software Engineering – Design ☐ Mobile Devices ☐ IT Security ☐ Distributed Systems ☐ Mobile Application Exercises

ELECTRICAL ENGINEERING AND COMMUNICATION TECHNOLOGY (B.ENG.)
- ☐ Digital Signals and Systems

ELECTRICAL ENGINEERING AND INFORMATION TECHNOLOGY (B.ENG.)
- ☐ Academic skills ☐ Radio Frequency Engineering ☐ Robotics and Automotive Systems ☐ Electric Power Grids

GRADUATE

HIGH INTEGRITY SYSTEMS (M.SC.)
- ☐ Safety Critical Computer Systems ☐ Mathematics Update
- ☐ Advanced IT-Security ☐ Data Mining
- **Electives:** ☐ Advanced Distributed Systems ☐ Advanced Testing Methods ☐ Human Machine Interface ☐ Smart Sensor Network Systems ☐ System Theory and Modelling ☐ Transaction Management ☐ Learning from Data

INFORMATION TECHNOLOGY (M.ENG.)
- ☐ Digital Baseband Transmission and Modulation Methods ☐ Digital Switching and Routing ☐ Vector Analysis ☐ Stochastic Signals and Systems ☐ Cloud Computing ☐ Computational Intelligence

MECHATRONIC AND ROBOTIC (M.SC.)
- ☐ Image Processing and Identification of Dynamic Systems
- ☐ Industrial Robots

BIO AND ENVIRONMENTAL ENGINEERING (M.SC.)
- ☐ Biomass for Industrial Energy and Renewable Compounds

INTERNATIONAL BUSINESS INFORMATION SYSTEMS (B.SC.)
- ☐ Enterprise Resource Planning with SAP ☐ Data Warehouses ☐ Project Management ☐ International Communication ☐ E-Business

ENGINEERING BUSINESS INFORMATION SYSTEMS (B.SC.)
- ☐ Enterprise Resource Planning with SAP ☐ Data Warehouses ☐ IT-Security ☐ Advanced Programming ☐ Project Management

MECHATRONICS (B.ENG.)
- ☐ Academic skills ☐ Control Systems ☐ Automotive Mechatronics

MECHANICAL ENGINEERING (B.ENG.)
- ☐ Fluid Dynamics ☐ Industrial Engineering and Quality Management

QUESTIONS?

Should you have any question concerning the English-taught classes open to incoming students please contact:

Elisa Lange | Incoming Students
✉ incoming.exchange@io.fra-uas.de

Check our Website for updates:
http://www.frankfurt-university.de/international.html

Frankfurt University of Applied Sciences | International Office
Nibelungenplatz 1 | 60318 Frankfurt

UNDERGRADUATE

INTERNATIONAL BUSINESS ADMINISTRATION (B.A.):
- ☐ Marketing, Logistics and Production ☐ Financial and Management Accounting III ☐ Statistics for Business ☐ Macroeconomics ☐ Business Information Systems II ☐ Cultural Diversity ☐ European and International Business Law ☐ International Economics ☐ International Marketing ☐ Transport Geography and International Trade ☐ International Finance ☐ Business Ethics

INTERNATIONAL FINANCE (B.SC.)
- ☐ Comparative Banking ☐ Accounting for Finance ☐ Multinational Finance ☐ International Taxation ☐ Monetary Economics and ECB Watching* ☐ Computer Based Investment Analysis* ☐ Behavioral Finance

TOURISM MANAGEMENT (B.A.) |
- ☐ Logistics & Purchasing Management ☐ International and Cross Cultural Management

AVIATION MANAGEMENT (B.A.)
- ☐ Logistics & Purchasing Management ☐ Cross Cultural Management

GRADUATE

ACCOUNTING AND FINANCE (M.SC.)
- ☐ Financial Modelling and Valuation
- ☐ Data Management
- ☐ Management Accounting and Control
- ☐ Research Project (15 ECTS)

GLOBAL LOGISTICS (M.SC.)
- ☐ Supply Chain Management
- ☐ IT-Technology in Logistics
- ☐ General Frame-work in Transport Economics
- ☐ Change Management
- ☐ Research Project in Applied Logistics and Economics (10 ECTS)

LEADERSHIP (M.A.)
- ☐ Leadership and Ethics

*please only select this module if you fulfill all pre-requisites

Wissen durch Praxis stärkt