



**h\_da**

HOCHSCHULE DARMSTADT  
UNIVERSITY OF APPLIED SCIENCES

INTERNATIONAL OFFICE



## **Classes taught in English at h\_da**

**Academic Year 2019/2020**

Classes in **green** are usually offered in German, but can be offered in English. However, this must be requested and arranged ahead of time.

Graduate Classes: students must meet the pre-requisites.

While Hochschule Darmstadt makes every effort to ensure that all information listed in this document is accurate and up-to-date, the information provided should only be used as a general guide and you should contact the Incoming Students Coordinator ([incoming.int@h-da.de](mailto:incoming.int@h-da.de)) for specific information.

## Winter Semester 2019/20

Fields, Level, Course Title	ECTS
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### All Departments

#### Bachelor/Master

Project in Applied Research - Supervision on request	
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### Architecture

#### Bachelor

English for Architects II - B2	2,5
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### Business

#### Bachelor

Business English I	5,0
European Economics and Politics	5,0
International Business Research Methods	5,0
Management, Organization and Leadership	5,0
Project Module	5,0
Supply Chain Management (Guest lecture)	5,0

### Chemical Engineering and Biotechnology

#### Bachelor

English for Chemical and Bio Engineers	5,0
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### Civil Engineering

#### Bachelor

English for Civil Engineers - B1	2,5
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## Computer Sciences

## Bachelor/Master

Introduction to Machine Learning (Guest lecture)	5,0
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## Bachelor

Game Development	5,0
Information Technology and Society	2,5
Intercultural Communication	2,5
Internetworking	5,0
Penetration Testing	5,0
Project System Development	7,5
Scientific Writing in Computer Science	2,5
Unix for Software Developers	5,0

## Master

Advanced Seminar	6,0
Cloud-native Application Engineering	6,0
Cryptography	6,0
Language-Oriented Programming	9,0
Parallel and Distributed Computing	6,0
Security of Web Applications	6,0
Service Oriented Architecture	6,0
Software Product Line Engineering	5,0

## Design

## Diplom

Communication Design - Visualisation methods and techniques	8,0
Communication Design - Conceptual Design (main semester project)	15,0
Communication Design - Experimental design	6,0
Industrial Design - Visualisation methods and techniques	4,0
Industrial Design - Conceptual Design (main semester project)	12,0
Industrial Design - Experimental Design	8,0
Presentation skills	8,0
Production and realisation	4,0

Fields, Level, Course Title	ECTS
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<b>Design</b>	
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<b>Diplom</b>	
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Technical Design	4,0
Technology - Photography	2,0

<b>Electrical Engineering and Information Technology</b>	
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<b>Bachelor</b>	
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Technical English for Electronical and Information Technology (B1)	2,5
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<b>Master</b>	
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Team project (M)	5,0
(I)Iot and Cloud Networking (WP)	2,5
Adaptive Control, Modeling and Identification	5,0
Advanced Digital Signal Processing	5,0
Advanced High Voltage Technology	5,0
Advanced Microcontroller Systems And Embedded Operating Systems	5,0
Advanced Programming Techniques	5,0
Advanced Software Design and Development	5,0
Advanced Software Design Techniques	5,0
Computer Vision	5,0
Engineering Responsibility	5,0
English for Electrical Engineers - B2.2	2,5
FPGA-based System on Chip Design	5,0
High Level Language Frameworks	1,0
Hydrogen Techniques and Fuel Cells	2,5
Image and Video Processing	2,5
Microwave Components and Systems	5,0
Mobile Communications	2,5
Network Security	2,5
Power System Operation	5,0
Project Management	5,0
Renewable Energy Systems	5,0
Safety in Industrial Automation	5,0
Satellite Communications	2,5

**Electrical Engineering and Information Technology****Master**

Smart Home	2,5
Team Project	5,0
VLSI Design and Testing	5,0

**Language Center****Bachelor/Master**

Englisch A1/A2 - Intensivkurs	2,5
Englisch B1: Brush up your Grammar Skills I	2,5
Englisch B1: Communicating in English II (ZIS)	2,5
Englisch B1: Communication Skills I (ZIS)	2,5
Englisch B1: English for your job II (ZIS)	2,5
Englisch B2: Brush up your Grammar Skills III	2,5
Englisch B2: Communicating in English IV (ZIS)	2,5
Englisch B2: Communicating in intercultural relations IV (ZIS)	2,5
Englisch B2: Communication skills III (ZIS)	2,5
Englisch B2: Discover Life Around the World IV (ZIS)	2,5
Englisch B2: English for your job III (ZIS)	2,5
Englisch C1: Communicating in intercultural relations V (ZIS)	2,5
Englisch C1: Delivering Winning Applications (ZIS)	2,5
Englisch C1: Discover Life Around the World V (ZIS)	2,5
Englisch C1: Intercultural Communication (ZIS)	2,5
Englisch C1: International Marketing and Management (ZIS)	2,5
Englisch C1: Meetings and Presentations (ZIS)	2,5
English for Architects I (B2)	2,5
Professional English-Basics (B2) (ABD)	2,5

**Mechanical and Plastics Engineering****Bachelor**

Adaptive Control, Modeling und Identification	5,0
Computer Vision	5,0
Safety in Industrial Automation	5,0

## Mechanical and Plastics Engineering

## Bachelor

Safety in Industrial Automation (Lab and project)	2,5
Technical English for Mechanical Engineering (B1/B2)	2,5
Technical English for Mechatronics (B1)	2,5
Technical English for Mechatronics (B2/C1)	2,5
Technical English for Plastics Engineering (B1/B2)	2,5

## Media

## Bachelor/Master

Emerging Technologies: 3D Audio / VR Audio	5,0
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## Bachelor

Drawing for Animation	5,0
Animation & Game Methodology 1 / A&G Studies 1	10,0
Animation & Game Design 1 V	5,0
Animation & Game Methodology 1/ Legal and ethical Issues in Animations & Games 1   Diversity and Interculturalism	10,0
Animation & Game Methodology 1/Producing and Production Management 1	5,0
Animation & Game Methodology 3/ Legal and Ethical Issues 3: Media and Entertainment Law	5,0
Applied Sciences 1	5,0
Applied Sciences 2	5,0
Basic Principles of Design in Expanded Realities	10,0
C++	5,0
Character Animation	5,0
Drawing	5,0
Drawing for Animation	5,0
Fundamentals of Technology in Expanded Realities	10,0
Game Design	5,0
Game Development 1 P	5,0
Creative Strategies - Digital Storytelling	15,0

## Media

## Bachelor

Game Studies - Onboarding	5,0
Games For Release	5,0
Houdini	5,0
Improtheater	5,0
Interactive Narrative: Storywriting for Games	5,0
Methodologies 1: Media Studies	5,0
Photogrammetrie	5,0
Principles of Design and Expanded Realities	10,0
Projektwerkstatt 3	15,0
Projektwerkstatt 3 + 5 + P7	15,0
Projektwerkstatt 5	20,0
Shader Programmierung	5,0
Sound Design for animations, games and immersive media	5,0
Sound Recording Workshop	5,0
TechArt 1 V	5,0
Technology in Expanded Realities	10,0
Transdisciplinary Media Cultural Project	15,0
UI/UX Design	5,0
Unreal Engine, Tutorium	5,0
Waterfall, Scrum, Kanban, and beyond	5,0

## Master

Advanced Event and Display Technologies: Fulldome Film and Media	5,0
Agile Leadership	5,0
Avantgarde in Digital Media	5,0
Creative Strategies Digital Storytelling	5,0
Emerging Technologies	5,0
Innovation - anderer Titel	5,0
Interculturality and Inclusion in Media Cultural Work	5,0
Leadership by Arts	5,0
Media Aesthetic Education Practices	5,0
Media Cultural Project Management	5,0
Media Cultural Strategies in Corporations and Institutions	5,0
Media Project - Scientific Concepts and Realisation	15,0

Fields, Level, Course Title	ECTS
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**Media**

**Master**

Media Project -Strategic Concepts and Realisation	15,0
Media, Entertainment and Event Law	5,0
Strategies in Leadership	5,0
Technology and Society	5,0

**Social and Cultural Sciences**

**Bachelor/Master**

Issues in Rural Development in Low-Income Countries	2,5
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**Bachelor**

Englisch III /1 (Legal English I)	2,5
English for academic purposes (B2) (Business Psychology)	2,5
English I (International Law ) (B1)	2,5
International Law II	2,5
Open Source Software Project	2,5

**Social Sciences General Studies (open to all students)**

**Bachelor/Master**

American Dream And Awakening	2,5
Conflict and Factors for Sustainable Resolution	2,5
Digital Media and the Industrialization of our Thinking	2,5
Intercultural Communication in Organisations and at the Work Place	2,5
Neuroenhancement	5,0
Public Speaking and Presentation	2,5
Smartphone in daily usage - Relief or burden?	2,5
The Age of Sustainable Development	2,5

**Social Work**

**Bachelor**

"Music of Future/Future of Music" Practice and critical reflexion of an innovative creative form of music-making as an artistic and socially-relevant Music Practice	2,5
Attachment and Relationship as an Instrument in Social Work	2,5



## Social Work

## Bachelor

Biographical memory and professional patterns of interaction	2,5
Child Labour and Child Migration	4,0
Cinema-therapy, cinema-education and counseling through film-making	2,5
Global Migration Theorie 1+2	2,5
Global migrations: causes, current dynamics and consequences	2,5
Migrants, refugees or mixed migrations? Mechanisms and consequences of migrant labelling in the European border regime	2,5
Social Work and Social Workers in International Organisations	2,5
The transnational challenge to social work practice and research	2,5
Transnational social protection: states, markets, families and NGOs	2,5
Use your voice-have a voice! Initiating vocal activities in groups	2,5

# Summer Semester 2020

Fields, Level, Course Title	ECTS
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## All Departments

### Bachelor/Master

Project in Applied Research - Supervision on request	
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## Architecture

### Bachelor

English for Architects (B2)	2,5
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## Business

### Bachelor

Business English I	5,0
Business English II	5,0
European Economics and Politics	5,0
Applied International Business Research Methods	5,0
Management, Organization and Leadership	5,0

## Chemical Engineering and Biotechnology

### Bachelor

English for Chemical and Bio Engineers	5,0
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## Civil Engineering

### Bachelor

Technical English for Civil Engineers (B2)	2,5
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## Computer Sciences

### Bachelor

Automotive Security	5,0
Compiler Construction	5,0
Construction of Multi-Touch and Multi-User Interfaces	5,0
Genetic Algorithms	5,0

## Computer Sciences

## Bachelor

Information Technology and Society	2,5
IT-Law / Data Protection Law	2,5
Introduction to Artificial Intelligence	5,0
Project System Development	7,5
Scientific Writing for Computer Science	2,5

## Master

Advanced Communication Networks	6,0
Applied Artificial Intelligence	9,0
Biometric Systems	6,0
Cryptography	6,0
Network Simulation	6,0
Reference Architectures and Patterns	6,0

## Design

## Diplom

Communication Design - Visualisation methods and techniques	8,0
Communication Design - Conceptual Design (main semester project)	15,0
Communication Design - Experimental Design	6,0
Industrial Design - Visualisation methods and techniques	4,0
Industrial Design - Conceptual Design (main semester project)	12,0
Industrial Design - Experimental Design	8,0

## Electrical Engineering and Information Technology

## Bachelor

English for Electrical Engineers - B2.2	2,5
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## Master

Advanced Control of Electrical Drives	5,0
Advanced Graphical Programming of Control Systems	2,5
Advanced Modulation	3,75
Advanced Sensors for the Internet of Things	2,5
CMOS Analog Circuits	3,75

## Electrical Engineering and Information Technology

## Master

Digital System Design	3,75
Embedded Architectures and Applications	3,75
Embedded Signal Processing Systems	3,75
Field, Waves and Antennas	3,75
Human Machine Interfaces	2,5
Industrial Robotics	3,75
Information Networks	3,75
Information Technology in Industrial Automation	3,75
Optical Communications	2,5
Power Electronics for Drives and Energy Systems	5,0
Safety in Embedded Control Systems	2,5
Smart Grids Technology	4,0
State-Space Control Design	3,75
Switch Gear	2,5
System Driven Hardware Design	2,5
Team Project (Automation)	5,0
Team Project (Communication)	5,0
Team Project (Embedded)	5,0
Team Project (Power)	5,0
Wireless Systems (Technologies) (Elective)	2,5

## Language Center

## Bachelor/Master

Englisch B2: Communicating in English IV	2,5
Englisch B2: Communication skills III	2,5
Englisch B2: Communication skills IV	2,5
Englisch B2: English for your job III	2,5
Englisch B2: Preparation for English language certificates	2,5
Englisch C1: Communicating in intercultural relations V	2,5
Englisch C1: Delivering Winning Applications	2,5

**Language Center****Bachelor/Master**

Englisch C1: Discover Life Around the World V	2,5
Englisch C1: Discover Life around the World VI	2,5
Englisch C1: Intercultural Communication	2,5
Englisch C1: Presenting in English	2,5
English B1 - Brush up your Grammar Skills II	2,5
English B1 - Brush up your Grammar Skills IV	2,5
English B1 - Communication Skills I	2,5
English B1 - English for you job II	2,5
English B2 - Communicating in English II	2,5
English B2 - English for your job II	2,5

**Mechanical and Plastics Engineering****Bachelor**

Technical English for Plastics Engineering - B1/B2	2,5
Technical English for Mechanical Engineering - B1.2	2,5
Technical English for Mechatronics - B1	2,5
Failure Analysis	5,0

**Master**

Fracture Mechanics	5,0
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**Media****Bachelor**

A&G Design for Producers	2,5
A&G Methodology 2	2,5
Animation and Game Concept Development 1	5,0
Animation and Game Design 2 A	5,0
Animation and Game Direction and Producing 1	5,0
Animation and Game Direction Elective 1.1	5,0
Animation and Game Direction Elective 1.2	5,0
Animation and Game Theory and Culture	5,0

## Media

## Bachelor

Applied Sciences 2	5,0
Arts and Expanded Realities	5,0
Camera & Sound & Filmmaking Workshop	5,0
Deep Learning for Video Games - 3.0 SWS	5,0
Drawing XXX	5,0
Film semiotics	5,0
For the Love of Pixels: Fantasy Consoles and the Essence of Games	5,0
Game Development 2	2,5
Game Development for Producers	2,5
Media Project	5,0
Media Technology	5,0
Methodologies 2: Expanded Realities Studies	5,0
Methodology 6	20,0
Mise en Scène for Animations and Games	5,0
Practical Effects	5,0
Principles of Design and Expanded Realities	10,0
Producing/Meth P2	2,5
Project 3: Discover Space and Time	15,0
Project Workshop 2 ("Projektwerkstatt 2")	15,0
Project Workshop 2+6 ("Projektwerkstatt 2+6")	15,0
Project Workshop 6 ("Projektwerkstatt 6")	20,0
Technical Art 2	5,0
Technical Art prod	5,0
Technology in Expanded Realities	10,0
The Photographic Diary	5,0

## Master

Agile Project Management	15,0
Avant-garde in Digital Media	5,0
Creative Strategies - Visual Design Conception	15,0
Creative Strategies Digital Storytelling	5,0

## Media

### Master

Creative Strategies: Storytelling for Animation	15,0
Creative Strategies: Worldbuilding	15,0
Curtaorial Strategies: Concepts and Applications	5,0
Developing a Listening Culture by Augmented Reality Earplays and Features	5,0
Developing AR&VR learning apps	15,0
Digital Journalism and Communications	5,0
Digital Media Strategies of Transmitting Media Art	5,0
Fulldome Film and Media	5,0
Innovation - Creative Methods	15,0
Interculturality and Inclusion in Media Cultural Work	5,0
Lifelong Learning	5,0
Media Concept and Realization	15,0
Media Concept and Realization	15,0
Media Project Management	5,0
Research Methods	6,0
Society (lecture)	2,5
Society (Practical class)	2,5
Strategies of Leadership: XR Remote	15,0
Transdisciplinary Media Cultural Project 1 & 2	15,0
VR Audio/ 3D Audio	5,0

## Social and Cultural Sciences

### Bachelor

American copyright and patent law	2,5
American trademark and competition law	2,5
Englisch III /2 (Legal English I)	2,5
International Law I	2,5

**Social Sciences General Studies** (open to all students)**Bachelor/Master**

Cross culture	2,5
Digital cultures	2,5
Digital emotions	2,5
Innovation in Transport and Mobility Behavior	2,5
Smartphone in daily use. Relief or burden?	2,5
Sustainable Development	2,5
The Social Effects of the Corona Crisis – International perspectives	2,5

**Social Work****Bachelor**

"Music of Future/Future of Music" Practice and critical reflexion of an innovative creative form of music-making as an artistic and socially-relevant Music Practice	2,5
Cinema-therapy, cinema-education and counseling through film-making	2,5
Cultural diversity: multi-, inter- and transcultural approaches	2,5
Global Migration Theorie 1 - Narratives on Flight and Migration	2,5
Global Migrations and Refugee Aid (Theory Seminar, Part 2)	2,5
Transnational Social Work	2,5
Use your voice-have a voice! Initiating vocal activities in groups	2,5