



h_da

HOCHSCHULE DARMSTADT
UNIVERSITY OF APPLIED SCIENCES

INTERNATIONAL OFFICE



**Classes taught in
English at h_da**

Academic Year 2018/2019

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) for specific information.

Winter Semester 2018/19

Fields, Level, Course Title	ECTS
-----------------------------	------

All Departments

Bachelor/Master

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

Architecture

Bachelor

English for Architects I - B2	2,5
English for Architects II - B2	2,5

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
Winter University Programme - International Marketing and Sales	4,0

Chemical Engineering and Biotechnology

Bachelor

English for Chemical and Bio Engineers	5,0
--	-----

Computer Sciences

Bachelor

Advanced Programming Techniques	7,5
Compiler Construction	5,0
Genetic Algorithms	5,0
Information Technology and Society	2,5
Intercultural Communication	2,5
IT-Law / Data Protection Law	2,5
Penetration Testing	5,0
Project System Development	7,5
Unix for Software Developers	5,0

Master

Advanced Communication Networks	6,0
Advanced Project Management	6,0
Language-Oriented Programming	9,0
Natural Language Processing	6,0
Parallel and Distributed Computing	6,0
Security of Web Applications	6,0
Security Protocols and Infrastructures	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

Design

Diplom

Presentation skills	8,0
Production and realisation	4,0
Technical Design	4,0
Technology - Photography	2,0

Electrical Engineering and Information Technology

Bachelor

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

Master

Advanced Microcontroller Architectures	2,5
Advanced Modulation and Coding	7,5
Advanced Programming Techniques	5,0
Advanced Programming Techniques and Engineering Processes	5,0
Autonomous Systems	7,5
Distributed Systems	2,5
Embedded Operating Systems/Embedded Design	5,0
Engineering Processes	5,0
Event- discrete Systems	2,5
Fuell Cells and Hydrogen Techniques	2,5
High Level Languages and Frameworks	2,5
High Voltage Technology	5,0
Information Networks	7,5
Intelligent Automation for Safe Processes and Products	5,0
Microelectronic Systems	7,5
Power Systems and Control Technology	7,5
Power Systems Operational Training	2,5
Renewable Energy Systems	7,5
Satellite Communications	2,5
Signal Processing Hardware	7,5
Task planning in unstructured environments	5,0
Theory of Eletrcial Fields	7,5

Language Center**Bachelor/Master**

English A1/A2	2,5
English B1 - Brush up your Grammar Skills I	2,5
English B1 - Communication Skills & more I	2,5
English B1 - Communication skills & more II	2,5
English B1 - Communication skills & more III	2,5
English B1 - English for your job II	2,5
English B2 - Brush up your Grammar Skills III	2,5
English B2 - Communicating in English IV	2,5
English B2 - Delivering Winning Applications	2,5
English B2 - English for your job III	2,5
English B2 - Putting ideas into words	2,5
English C1 - Communicating in intercultural relations	2,5
English C1 - Delivering Winning Applications	2,5
English C1 - Discover Life Around the World V	2,5
English C1 - Intercultural Communication	2,5

Mechanical and Plastics Engineering**Bachelor**

English for Mechanical Engineering - B1.2	2,5
Public Speaking and Presentation	2,5

Media**Bachelor/Master**

C++	5,0
Concept Art	5,0
Drawing for Animation	5,0
Game Design	5,0
Interactive Narrative: Storywriting for Games	5,0
Media Law advanced	5,0

Media

Bachelor/Master

C++	5,0
Concept Art	5,0
Drawing for Animation	5,0
Game Design	5,0
Interactive Narrative: Storywriting for Games	5,0
Media Law advanced	5,0
Shader in Unity	5,0
Storytelling for Animated Shorts	5,0
VR Classroom	5,0

Bachelor

Animation and Game Design 1	5,0
Animation and Game Methodology 1 (A&G Studies 1 /Legal and ethical Issues in Animations & Games 1 / Diversity and Interculturalism /Producing and Production Management 1)	10,0
Animation and Game Methodology 3 (Legal and Ethical Issues 3 - Media and Entertainment Law)	5,0
Character Animation	5,0
Drawing & Visualization	5,0
Game Development	5,0
Photoreal Compositing	5,0
Project Factory 3	15,0
Project Factory 3 + 5 + P7	15,0
Project Factory 5	15,0
Shader Programming	5,0
Technical Art 1	5,0
Waterfall, Scrum, Kanban, and beyond	5,0

Master

Advanced Event and Display Technologies - Fulldome	5,0
Copyright-, Entertainment- and Social Media Law	5,0
Creative Strategies - Design Basics	15,0
Creative Strategies - Digital Storytelling	15,0

Fields, Level, Course Title	ECTS
-----------------------------	------

Media

Master

Creative Strategies - Visual Design Conception	15,0
Emerging Technologies - 3D Audio in audiovisual contexts	5,0
Emerging Technologies - 3D-Audio Dramaturgies	5,0
Emerging Technologies - ARG	15,0
Innovation - Technology, Ideation, Management	15,0
Interculturality and Inclusion in Media Cultural Work	5,0
Leadership by Arts	15,0
Leadership Concepts and Practices in Art and Culture Institutions	5,0
Marketing, Publishing and Public Relations	5,0
Media Aesth Education Practices, Enabling Digital Culture in Challenged Environments	5,0
Media Concept and Realisation	15,0
Media, Culture and Technologies, historical and future Perspectives	5,0
Organization, Funding& Finances in Curatorial Contexts	5,0
Scientific Progress in Digital Media - Explanatory Videos	15,0
Self and agile Project Management	15,0
Strategies of Leadership - Brandes Experience	15,0
TMC Project 1+2	15,0
Unity3D Beginners Course, incl. Introduction to VR	15,0

Social Sciences

Bachelor

Communication in a globalized world	2,5
International Law II	2,5

Social Sciences General Studies (open to all students)

Bachelor/Master

Digital Media and the Industrialization of our Thinking	2,5
European Economic Issues	2,5
Online Supported PR Evaluation	2,5
Public Speaking and Presentation	2,5
The Structure of German Economy	2,5

Social Work**Bachelor**

Biographical memory and professional patterns of interaction	2,5
Global Migration and Refugee Aid	2,5
Land grabbing and eviction - Communities between developers/ investors and state institutions	2,5
Self reflection in Social Work through experiential techniques and cinema therapy	2,5
Social work in the field of flight and migration	2,5
Use your voice- have a voice! Initiating vocal activities in groups	2,5

Summer Semester 2019

Fields, Level, Course Title	ECTS
-----------------------------	------

All Departments

Bachelor/Master

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

Architecture

Bachelor

Architectural design project - alternating subjects according to semester	10,0
English for Architects I - B2	2,5
English for Architects II - B2	2,5
International Building Design (IBD) – elective subject	2,5

Business

Bachelor

Business English I	5,0
Business English II	5,0
European Economics and Politics	5,0
International Business Research Methods	5,0
Management, Organization and Leadership	5,0
Project Management - Process Improvement Projects	5,0

Chemical Engineering and Biotechnology

Bachelor

English for Chemical and Bio Engineers - B2	5,0
---	-----

Civil Engineering

Bachelor

English for Civil Engineers - B1	2,5
----------------------------------	-----

Computer Sciences

Bachelor

Automotive Security	5,0
Case Studies in Information Security	5,0
Compiler Construction	5,0
Game Development	5,0
Information Technology and Society	2,5
Internetworking	5,0
Introduction to Artificial Intelligence & PROLOG programming	5,0
Introduction to Machine Learning	5,0
IT Law - Data Protection Law	2,5
Project System Development	7,5
Scientific Writing in Computer Science 1	2,5

Master

Advanced Internetworking	6,0
Advanced Seminar	5,0
Applied Artificial Intelligence	9,0
Biometric Systems	6,0
Bussiness Process Engineering	6,0
Cloud-Computing Technologies	6,0
Cryptography	6,0
Culture and Language I	5,0
Culture and Language II	5,0
Independent R&D Studies	6,0
Network Simulation	6,0
Project System Development II	7,5
Real-Time Systems	6,0
Reference Architectures and Patterns	6,0
Software Product Line Engineering	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
Presentation skills	8,0
Production and realisation	4,0
Technical Design	4,0
Technology - Photography	2,0

Electrical Engineering and Information Technology

Bachelor

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

Master

Adaptive and learning control	2,5
Complex digital architectures (lectures and Lab)	7,5
Control of Electrical Drives & E-Mobility	7,5
Controlled Drives	7,5
Design and Test of Microelectronic Systems	7,5
Digital Signal Processing	7,5
E-Mobility	2,5
Information and simulation systems in industrial development and automation	7,5
Microwave Components and Systems	7,5
Model-based real-time simulation of mechatronic systems	7,5
Optical Communications	7,5
Power - Electronics & Switching Power Supply	7,5
Smart Grids Technology	7,5
Synthesis of dynamics systems using state-space models	7,5

Language Center**Bachelor/Master**

English A1/A2	2,5
English B1 - Brush up your Grammar Skills I	2,5
English B1 - Brush up your Grammar Skills III	2,5
English B1 - Communicating in English I	2,5
English B1 - Communicating in English II	2,5
English B1 - Communication Skills & more I	2,5
English B1 - Communication skills & more II	2,5
English B1 - English for you job II	2,5
English B2 - Brush up your Grammar Skills IV	2,5
English B2 - Communication in English	2,5
English B2 - Communication skills & more III	2,5
English B2 - Delivering Winning Applications	2,5
English B2 - Discover Life Around the World IV	2,5
English B2 - English for your job III	2,5
English B2 - Putting ideas into words	2,5
English B2 - The U.S.A - Different Regions, Different Life Styles	2,5
English C1 - Delivering Winning Applications	2,5
English C1 - Discover Life Around the World V	2,5
English C1 - News and Views from Around the World	2,5
English C1 - Intercultural Communication	2,5
English C1 - The U.S.A. - Different Regions, Different Life Styles	2,5
English Refresher Course A1/A2	2,5

Mechanical and Plastics Engineering**Bachelor**

English for Mechanical Engineers - B1.2	2,5
Technical English for Plastics Engineers - B1/B2	2,5

Master

Fracture Mechanics	5,0
--------------------	-----

Media**Bachelor**

Animation and Game Design 2 A	5,0
Animation and Game Design for Producers	2,5
Animation and Game Methodology 2	2,5
Game Development 2	5,0
Game Development for Producers	2,5
Machine Learning for Video Game	5,0
Methodology 6	20,0
Producing - Methodology P2	2,5
Project Factory 2+6	15,0
Project Factory 6	20,0
Technical Art 2	5,0
WP Security & Privacy	5,0

Master

Advanced Event and Display Technologies	5,0
Audience Research and Development	5,0
Avant Garde in Digital Media	5,0
Curatorial Strategies - Concepts and Applications	5,0
Emerging Technologies	5,0
Exam/Research/Colloquia Groups and Individuals 3&4	30,0
Industrial Placements	30,0
Interculturality and Inclusion in Media Cultural Work	5,0
Media Cultural Economy and Artistic Entrepreneurship	5,0
Media Cultural Project Management	5,0

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

Climate Change, Carbon Footprints, and Individual Consumption	2,5
---	-----

Social Work

Bachelor

Ageism and Intersectionality	2,5
Attachment Research from a Global Perspective	2,5
Cinema-therapy, cinema-education and counseling through film-making	2,5
Civic Education and Social Work	2,5
From Africa to Europe through Italy – a Summer school on flight / migration and the contribution of psychology and social work - Rome	5,0
Health Promotion and Prevention	2,5
International and European Social Work	2,5
The Storage of Auschwitz	2,5