



Hochschule Düsseldorf
University of Applied Sciences



Faculty of Media

Bachelor of Science

Media Informatics

Profile

In the first semesters of the bachelor's programme Media Informatics, you acquire the *fundamentals* of informatics and natural sciences. Elements of aesthetic and technical media design complement these fundamentals. You learn essential theories and methods as well as how to handle specific tools in practice.

Based on this knowledge, you can broaden and deepen your expertise and skills in advanced modules in digital media topics – particularly digitalisation. You can choose compulsory elective modules according to your interests to create your individual areas of specialisation – within applied informatics in interactive systems, web applications, advanced computer graphics, secure IT systems, mixed and virtual reality, multimedia communication, e-business; within digital media in communication design, visualisation, media production, digital literacy, corporate learning, 3D modelling. Alternatively, you can choose courses related to your studies from other HSD faculties.

Within projects, you learn to work together in teams, organise your work and develop media informatics products and applications. Such projects include conception, requirement analysis, planning, design, implementation and testing as well as maintenance and further development. During an external semester, you can work in a company, study abroad or expand your research skills. Thus, as a graduate, you have already acquired much of the practical experience potential employers often expect.

A dozen experienced professors and lecturers from professional practice teach the courses and supervise your autonomous work in well-equipped laboratories. At HSD you enjoy professional supervision.

Personal interests and required skills:

- You would like to be able to develop software yourself, systematically and in a team.
- You like to put together creative, technical solutions.
- You are not afraid of practical theories.
- You should master abstract thinking, be able to develop concepts and plan your work independently.
- You should be very committed and goal-oriented.

Please note: The language of instruction is mainly German.

Career Options

Graduates with a solid education in informatics and digital media are more and more wanted – in the region of Düsseldorf and Cologne, in Germany and worldwide. As a graduate of this bachelor's programme, you typically work in media systems development or at the interface between design and implementation.

The programme's focus on informatics in digital media is an important asset to many enterprises. Your individual profile developed in the programme may benefit web and media agencies, software developers, IT consulting firms, and IT service providers. Alternatively, you can continue with further studies, e.g. in our Master of Science Media Informatics.

Admission Requirements

Please check if you meet all requirements for admission to the study programme. Further information:

medien.hs-duesseldorf.de/bmi-en

SYLLABUS

SEMESTERS 1-3

- Object-Oriented Programming 1–2
- Web Programming
- Computer Networks
- Computer Architecture
- Database Systems 1–2
- Mathematics 1–3
- Formal Models and Algorithms
- Software Engineering
- Media Design 1–2
- Fundamentals of Computer Graphics
- Human-Computer Interaction
- Compulsory Elective Modules: Informatics Project 1–2
- Studying Professionally

SEMESTERS 4-5

- Web Engineering
- IT Security
- Operating Systems
- Digital Image and Sound Engineering
- Compulsory Elective Modules:
Advanced Topics A–D
- Compulsory Elective Modules: Media Project A–B
- Fundamentals of Business Administration
- Project Management, Media and IT Law

SEMESTER 6

- External Semester: professional work, studies abroad or research semester

SEMESTER 7

- Compulsory Elective Modules: Individual Specialisation, Scientific Work Based on a Chosen Subject
- Bachelor's Thesis and Colloquium

Please check the module manual for detailed information on the contents of the study programme at medien.hs-duesseldorf.de/bmi-en.

Further Information

Events for prospective students (in German only)

hs-duesseldorf.de/zsb_veranstaltungen

How to apply

hs-duesseldorf.de/prospectivestudents/degreeseekings/application

Information for international applicants

hs-duesseldorf.de/degreeseeking

About the programme and admission requirements

medien.hs-duesseldorf.de/bmi-en

Get in Touch

Dean's Office at the Faculty of Media

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Student Advisory and Counselling Service (ZSB)

studienberatung@hs-duesseldorf.de

hs-duesseldorf.de/zsb-en

Admissions Office

zulassung@hs-duesseldorf.de

hs-duesseldorf.de/zulassungsstelle (in German only)

International Office (IO)

international-office@hs-duesseldorf.de

hs-duesseldorf.de/io-en

Family Support Centre

familienbuero@hs-duesseldorf.de

hs-duesseldorf.de/fam-en

Disability Services (ABS)

barrierefrei@hs-duesseldorf.de

hs-duesseldorf.de/abs-en

Psychological Counselling Service (PSB)

info.psb@hs-duesseldorf.de

hs-duesseldorf.de/psb-en

HSD on social media
facebook.de/hsduesseldorf
instagram.com/hsduesseldorf

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