



International Summer School in Information Technology 2017

International Summer School

The Faculty of Computer Science at the Hochschule Worms, University of Applied Sciences in Germany will offer a Summer School in Information Technology for students from all over the world. This programme is a unique opportunity to learn about cutting-edge IT-Technology in only two to four weeks. The future-oriented courses have a well-balanced focus between theory and practical experience. Every student gains insights into the business world through weekly visits to international companies. Furthermore, the Summer School includes an intercultural introduction and an introduction to German business culture in order to become familiar with the local culture. Optional the students may attend a two-week German language course (beginner level, 24 lessons).

The Faculty provides state of the art equipment and an excellent infrastructure, from the laboratories through the computer pools. Students can choose between a two-week programme (1 module) and a four-week programme (2 modules) and will get up to 3 credit points (ECTS) per module.

The number of students per module is limited to 10 - 25 students.

Deadline for application is 2nd June 2017

Deadline for payment is 30th June 2017

Programme Period:

Module 1 31st July – 11th August 2017

Module 2 14th August – 25th August 2017

Tuition Fee:

Module 1 € 590,-

Module 2 € 590,-

German Language Course
(2 weeks, 24 lessons) € 180,-

For any question or any further information please do not hesitate to contact: Binder-Hobbach@hs-worms.de

Responsive Web Design

Specialized Course M 1.1, 31st July – 4th August 2017

Klaus Westermann

The way people browse the web is changing quickly. More users access the web with different devices - desktop computers, phones, tablets, wearables, TVs. Would'nt it be nice to design one page that provides an optimal viewing experience across that wide range of platforms?

Responsive Webdesign is a modern approach to web design that allows websites to adjust their appearance to suit different devices. A site designed with responsive web design adapts the layout to the viewing environment by using fluid, proportion-based grids, flexible images, and CSS 3 media queries.

In this three-day long, intensive practical course you'll learn the fundamentals of responsive web design. You'll create your own good looking page that provides an optimal viewing experience - easy reading and navigation with a minimum of resizing, panning, and scrolling - across a wide range of platforms from desktop computers to mobile devices.

Security and Privacy in the Internet of Things

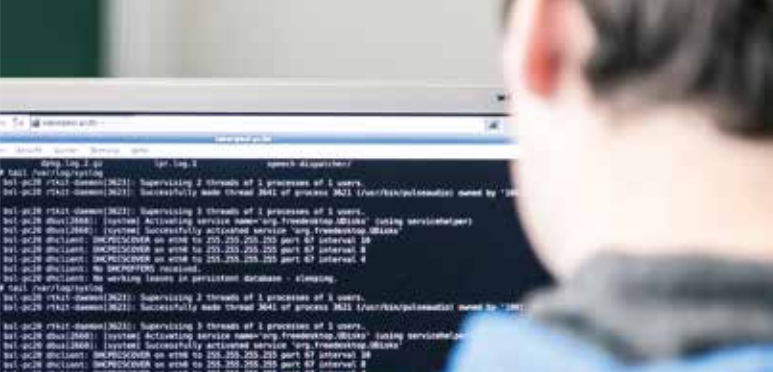
Specialized Course M 1.2, 7th – 11th August 2017

Prof. Dr. Steffen Wendzel

With smart homes, smart cities and various of other smart systems, the so-called Internet of Things can be considered a significant trend in the current decade. With the Internet of Things, several societal advantages in terms of housing, health-care, transportation, and other services arose.

However, recent research underpins the importance of information security and privacy in such a smart world. A new trend under this umbrella is 'information hiding', a discipline that deals with the exfiltration of confidential data out of organizations and with the leakage of sensitive private data.

The summer school course investigates the security and privacy aspects of the Internet of Things. It highlights the reasons for insecure smart devices from different perspectives (vendors, end-users, operators) and discusses both, elementary threads, with a focus on information hiding, and defense mechanisms, such as data leakage protection.



Web-based 2D & 3D Data Visualization

Specialized Course M 2.1, 14th – 18th August 2017

Prof. Dr. Alexander Wiebel

Data visualization takes large sets of abstract or spatial data and transforms them into expressive graphics. Thus it supports the powerful human visual system in extracting information, patterns and important characteristics from the data in order to obtain a deeper insight.

Making data visualization available in websites allows to efficiently communicate information on virtually every device in a platform-independent way. Computergenerated graphics and thus data visualization in a webbrowser environment are possible using open standards and libraries like HTML5, WebGL, d3.js and three.js.

This course will give an introduction into data visualization, the relevant computer graphics basics and their implementation using the mentioned standards and libraries.

Module structure of the first week

Monday	Tuesday	Wednesday	Thursday	Friday
	German Language Course	German Language Course	German Language Course	German Language Course
Welcome Session	Specialized Course	German Language Course	Specialized Course	Specialized Course
Intercultural Introduction including lunch	Lunch	Excursion to an International Company including lunch	Lunch	Lunch
Guided Tour through the City of Worms	Specialized Course		Specialized Course	Specialized Course
	Specialized Course		Specialized Course	Specialized Course

User Experience Design

Specialized Course M 2.2, 21st – 25th August 2017

Prof. Dr. Werner König

Since Apple launched the iPhone in 2007 a whole industry learned, in which way a great user experience can influence the success of a product. It was a turning point for many companies in the (electronics) market which mainly focussed on the functionality and price of a product until then. Today, User Experience Design is a key competence of designers, developers and project managers.

In the course User Experience Design, students learn how to systematically develop software and services with a focus on users, their particular needs, and the individual context of use in order to achieve high attractiveness and user satisfaction concerning the product, provided services, and the company itself.

The students learn how to create personas, context scenarios, and user stories and get knowledge about validating these artefacts by user interviews, focus groups, and questionnaires. Further topics of the course are fundamentals of human cognition as well as best practice approaches for user-centred design of websites, desktop applications and mobile apps.



Contact:
 Prof. Dr.-Ing. Jutta Binder-Hobbach
 Hochschule Worms
 Erenburgerstraße 19
 67549 Worms
 Germany
www.hs-worms.de/info

