

COURSE DETAIL

WEB TECHNOLOGIES

Country

Germany

Host Institution

Technical University Berlin

Program(s)

Technical University Berlin

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Computer Science

UCEAP Course Number

139

UCEAP Course Suffix**UCEAP Official Title**

WEB TECHNOLOGIES

UCEAP Transcript Title

WEB TECHNOLOGIES

UCEAP Quarter Units

5.50

UCEAP Semester Units

3.70

Course Description

Students gain an overview of the fundamental technologies of the World Wide Web (WWW) and their applications. They study the functionality of the WWW as an overlay network of the Internet and examine the underlying communication infrastructure and protocols. Students also study the different generations of the WWW and the current as well as the future development. They learn to semantically structure, design and link web content, to create dynamic web sites, and to program server-side applications and how to connect them with the front-end via interfaces. Course content includes foundations (the main parts of the WWW and its evolution over the past decades), web pages (the structure and design of web content with HTML and CSS), web applications (an overview of JavaScript, the DOM and AJAX), architecture and communication (the foundations of the OSI model with the consideration of the IP, TCP and UDP protocol as well as the explanation of the REST architectural style), server-side applications (creation of back-end applications with Node.js), selected APIs and frameworks.

Language(s) of Instruction

German

Host Institution Course Number

3433 L 7550

Host Institution Course Title

WEB TECHNOLOGIES

Host Institution Campus

Host Institution Faculty

Host Institution Degree

Host Institution Department

Institut für Telekommunikationssysteme

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