

## 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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