

# WEB TECHNOLOGIES (BA)

Web technologies are ever evolving. New tools, apps, sites, and algorithms constantly change norms and best practices in the field shift on a constant basis. Earning a degree in Web Technologies from the School of Continuing and Professional Studies (SCPS) at Loyola University Chicago prepares you for this fast-paced, ever-changing world.

Designed for those interested in careers in web development or design, web or social media analytics, or software engineering, SCPS's Web Technologies degree program provides students a strong foundation in the design and development of websites and web applications.

## Curriculum

The B.A. in Web Technologies comprises 120 credit hours. Courses are offered in an 8-week session format with online, evening, and weekend options.

Code	Title	Hours
<b>Major Courses</b>		
COMM 275	Web Design and Usability	3
CPST 242	Design for the Web	3
CPST 342	Introduction to Web Application Development	3
COMP 317	Social, Legal, and Ethical Issues in Computing	3
<b>Tracks</b>		
Students complete six courses within a chosen track:		18
<i>Design and Media Track</i>		
CPST 248	User Experience Design Fundamentals	
CPST 249	User Experience Design Tools and Techniques	
CPST 341	User Experience Design to Drive Business	
COMM 175	Introduction to Communication	
COMM 200	Digital Communication and Society	
COMM 261	Social Media	
<i>Data Track</i>		
COMP 170	Introduction to Object-Oriented Programming	
COMP 271	Data Structures I	
CPST 343 or another course selected with assistance from faculty advisor. (Elective Course)		
COMP 251	Introduction to Database Systems	
CPST 291	Dynamic Programming Languages	
CPST 325	Data Processing, Analysis, and Visualization	
<i>Development Track</i>		
COMP 170	Introduction to Object-Oriented Programming	
COMP 271	Data Structures I	
CPST 291	Dynamic Programming Languages (or another course selected with assistance from faculty advisor)	
Select three from the following:		
COMP 422	Software Development for Wireless and Mobile Devices	
COMP 424	Client-Side Web Design	
COMP 441	Human-Computer Interaction	
COMP 425	Rapid Applications Development	
<b>SCPS Courses</b>		
CPST 200	Introduction to Degree Completion	3

CPST 201	Civic Identity and Development	3
CPST 397	Capstone	3

### Core Requirements

The number of hours remaining toward Core requirements can vary due to transfer credit.<sup>1</sup>

### Mission Specific Requirements

Mission specific requirements can vary from 0 to 15 credit hours based on your prior credit.

### General Elective Requirements

Students may have some general elective coursework to complete if their transfer credit and remaining required hours (Core, mission specific, major, etc.) do not total 120.

**Total Hours** **120**

<sup>1</sup> Core Requirements - Learn More (<https://catalog.luc.edu/undergraduate/university-requirements/university-core/>)

## Suggested Sequence of Courses

The School of Continuing and Professional Studies provides a high-touch advising model in order to incorporate the professional and educational outcomes of the student as well as any transfer credit accepted. In order to provide students with maximum flexibility in their education and because everyone's academic background will vary, advisors will work directly with students to determine an appropriate sequence of courses starting at admission into their respective program based on their needs and expected time to completion.

## Additional Undergraduate Graduation Requirements

All Undergraduate students are required to complete the University Core, at least one Engaged Learning course, and UNIV 101. SCPS students are not required to take UNIV 101. Nursing students in the Accelerated BSN program are not required to take core or UNIV 101. You can find more information in the University Requirements (<https://catalog.luc.edu/undergraduate/university-requirements/>) area.

## Learning Outcomes

Upon degree completion, graduates will be able to:

1. Develop modern, standards-compliant web applications while demonstrating proficiency in best practices, utilizing contemporary web technology solutions, and effectively managing software project versions through version control techniques.
2. Critique website aesthetics, accessibility, and usability and apply graphic design principles to strategically align business objectives with UX Design goals by effectively utilizing the User Experience (UX) Design process.
3. Utilize client-side services to interact with server-side APIs, model and implement structured and unstructured data, and perform data analysis using standard toolkits and libraries.
4. Develop programs using fundamental programming constructs, data structures, and algorithms, while demonstrating the ability to choose appropriate solutions and justify their selections.
5. Apply object-oriented principles (abstraction, delegation, inheritance, and polymorphism) and design patterns, and demonstrate proficiency in programming, testing, and debugging using a mainstream object-oriented language.

6. Demonstrate knowledge of legal and ethical considerations in information technology and apply technical and ethical solutions.