

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 |
|---|---|-------|
| Major Courses | | |
| 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 |
| Tracks | | |
| 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 | |
| SCPS Courses | | |
| CPST 200 | Introduction to Degree Completion | 3 |

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| 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.¹

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

¹ 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.