WEB TECHNOLOGIES/ INFORMATION TECHNOLOGY LEADERSHIP AND STRATEGY (BA/MPS)

The BA Web Technologies/ MPS IT Leadership and Strategy program is an accelerated, online program that gives academically successful Loyola SCPS BA Web Technologies majors the opportunity to pursue the MPS degree in IT Leadership and Strategy while completing their BA degree. This program reduces the total number of courses needed and the total time needed for the combined degrees. Current accelerated bachelors/master's degree programs at LUC allow qualified students to take up to four graduate-level courses as undergraduates. This program will allow students in the BA Web Technologies program to take four of the courses from the MPS IT Leadership and Strategy in their senior year. One course will be taken as part of the major and three will be taken as elective courses and will count toward the degree requirements for both programs.

Related Programs

Major

- Web Technologies (BA) (https://catalog.luc.edu/undergraduate/continuing-professional-studies/web-technologies-ba/)

Combined

- Web Technologies/Instructional Design (BA/MPS) (https://catalog.luc.edu/undergraduate/accelerated-bachelors-masters-program/web-technologies-instructional-design-ba-mps/)

Curriculum

Up to 12 credit hours can be shared between the undergraduate and graduate degree. One of the MPS degree courses will count toward the BA Web Technologies major requirements: COMP 417 Social and Ethical Issues in Computing (in lieu of COMP 317) and should be taken in the students' senior year as an undergraduate. The other graduate courses from the MPS degree will be taken as electives during the student's senior year.

Code	Title	Hours
BA Requirements		
COMP 317	Social, Legal, and Ethical Issues in Computing [1]	3
COMM 275	Web Design and Usability	3
CPST 242	Design for the Web	3
CPST 342	Introduction to Web Application Development	3
COMP 170	Introduction to Object-Oriented Programming	3
COMP 251	Introduction to Database Systems	3
COMP 271	Data Structures I	3
CPST 291	Dynamic Programming Languages	3
CPST 343	Software Development for Mobile Devices	3
CPST 325	Data Processing, Analysis, and Visualization	3
CPST 248	User Experience Design Fundamentals	3
CPST 249	User Experience Design Tools and Techniques	3
CPST 341	User Experience Design to Drive Business	3
SCPS Courses		
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. [2]		
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.		
MPS Requirements		
COMP 417	Social and Ethical Issues in Computing [1]	3
COMP 477	IT Project Management	3
ITLS 445	Introduction to IT: Networking, Cloud & Security	3
ITLS 447	Cybersecurity Governance, Planning, and Incident Response	3
ITLS 449	Advanced Topics: Emerging Technologies	3
ITLS 451	Human-Centered Management	3
ITLS 453	Developing Strategic Plans	3
Select three (3) ITLS Electives courses - 400-level or above (p. 1) [3]		9
Total Hours		**75**

[1] One of the MPS degree courses will count toward the BA Web Technologies major requirements: COMP 417 Social and Ethical Issues in Computing (in lieu of COMP 317) and should be taken in the students' senior year as an undergraduate.

[2] Core Requirements - Learn More (https://catalog.luc.edu/undergraduate/university-requirements/university-core/)

[3] Electives will be selected from existing graduate courses (400 level or higher) at Loyola University Chicago. They will typically be chosen from SCPS (and may include courses in all graduate programs housed in SCPS) and the Computer Science Department. Electives will be determined in conjunction with the program director.

Electives

Code	Title	Hours
COMP 403	Operations Management	3
COMP 420	Software Systems Analysis	3
COMP 422	Software Development for Wireless and Mobile Devices	3
COMP 424	Client-Side Web Design	3
COMP 441	Human-Computer Interaction	3
COMP 443	Computer Networks	3
COMP 447	Intrusion Detection and Computer Forensics	3
COMP 448	Network Security	3
COMP 449	Wireless Networking and Security	3
COMP 488	Computer Science Topics	1-4
INDN 420	Instructional Design Theories and Models	3
INDN 421	Design & Development of Instructional Materials	3
INDN 430	Performance Improvement in Organizations	3

INDN 431	Fundamentals of Learning Analytics	3
INDN 440	Applications of Human Centered Design Principles	3
MPP 400	Policy Design and Analysis	3
MPP 401	Analytical Tools in Public Policy	3
MPP 403	Public Budget and Finance	3
MPP 404	Public Policy Process	3
MPP 405	Statistical Methods & Analysis for Public Policy I	3
MPP 406	Statistical Methods & Analysis Public Policy II	3
MPP 410	Special Topics in Public Policy	3
MPP 413	Intergovernmental Relations	3
PSLD 400	Introduction to Public Service	3
PSLD 402	Foundations of Global Strategic Communication	3
PSLD 403	Program Management and Development	3
PSLD 404	Data, Visualization and Evaluation	3
PSLD 405	Design Thinking in Mitigating Complex Social Problems	3
PSLD 430	Understanding and Mitigating Poverty	3
PSLD 431	Foundations of Social and Sustainable Development	3
PSLD 432	Gender Diversity & Sustainable Social Development	3
PSLD 433	Social Analysis Inequality Poverty and Development	3

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.

One of the MPS degree courses will count toward the BA Web Technologies major requirements: COMP 417 Social and Ethical Issues in Computing (in lieu of COMP 317) and should be taken in the students' senior year as an undergraduate.

Guidelines for Accelerated Bachelor's/Master's Programs

Terms

- Accelerated Bachelor's/Master's programs: In this type of program, students share limited credits between their undergraduate and graduate degrees to facilitate completion of both degrees.
- Shared credits: Graduate level credit hours taken during the undergraduate program and then applied towards graduate program requirements will be referred to as shared credits.

Admission Requirements

Accelerated Bachelor's/Master's programs are designed to enhance opportunities for advanced training for Loyola's undergraduates. Admission to these programs must be competitive and will depend upon a positive review of credentials by the program's admissions committee. Accordingly, the admission requirements for these programs may be higher than those required if the master's degree were pursued entirely after the receipt of a bachelor's degree. That is, programs may choose to have more stringent admissions requirements in addition to those minimal requirements below.

Requirements:

- Declared appropriate undergraduate major,
- By the time students begin taking graduate courses as an undergraduate, the student has completed approximately 90 credit hours, or the credit hours required in a program that is accredited by a specialty organization,[1]
- A minimum cumulative GPA for coursework at Loyola that is at or above the program-specific requirements, a minimum major GPA that is at or above the program-specific requirements, and/or appropriate designated coursework for evaluation of student readiness in their discipline.[2]

Students not eligible for the Accelerated Bachelor's/Master's program (e.g., students who have not declared the appropriate undergraduate major) may apply to the master's program through the regular admissions process. Students enrolled in an Accelerated Bachelor's/Master's program who choose not to continue to the master's degree program upon completion of the bachelor's degree will face no consequences.[3]

Ideally, a student will apply for admission (or confirm interest in proceeding towards the graduate degree in opt-out programs) as they approach 90 credit hours. Programs are encouraged to begin advising students early in their major so that they are aware of the program and, if interested, can complete their bachelor's degree requirements in a way that facilitates completion of the program. Once admitted as an undergraduate, Program Directors should ensure that students are enrolled using the plan code associated with the Accelerated Bachelor's/Master's program. Using the plan code associated with the Accelerated Bachelor's/Master's program will ensure that students may be easily identified as they move through the program. Students will not officially matriculate into the master's degree program and be labeled as a graduate student by the university, with accompanying changes to tuition and Financial Aid (see below), until the undergraduate degree has been awarded. Once admitted to the graduate program, students must meet the academic standing requirements of their graduate program as they complete the program curriculum.

1 Programs that have specialized accreditation will adhere to the admissions criteria provided by, or approved by, their specialized accreditors.

2 The program will identify appropriate indicators of student readiness for graduate coursework (e.g., high-level performance in 300 level courses). Recognizing differences between how majors are designed, we do not specify a blanket requirement.

3 If students choose not to enroll in the Accelerated Bachelor's/Master's program, they still must complete all of the standard requirements associated with the undergraduate degree (e.g., a capstone).

For more information on Admissions requirements, visit here (https://gpem.luc.edu/portal/admission/?tab=home).

Curriculum

Level and progression of courses. The Accelerated Bachelor's/Master's programs are designed to be competitive and attractive to our most capable students. Students admitted to Accelerated Bachelor's/Master's programs should be capable of meeting graduate level learning outcomes. Following guidance from the Higher Learning Commission, only courses taken at the 400 level or higher (including 300/400 level

courses taken at the 400 level) will count toward the graduate program.[1,2] Up to 50% of the total graduate level credit hours, required in the graduate program, may come from 300/400 level courses where the student is enrolled in the 400 level of the course. Further, at least 50% of the credit hours for the graduate program must come from courses that are designed for and restricted to graduate students who have been admitted to a graduate program at Loyola (e.g., enrolled in plan code that indicates the Accelerated Bachelor's/Master's program, typically ending with the letter "D").[3]

In general, graduate level coursework should not be taken prior to admission into the Accelerated Bachelor's/Master's program. Exceptions may be granted for professional programs where curriculum for the Accelerated Bachelor's/Master's program is designed to begin earlier. On the recommendation of the program's Graduate Director, students may take one of their graduate level courses before they are admitted to the Accelerated Bachelors/Master's program if they have advanced abilities in their discipline and course offerings warrant such an exception.[4] Undergraduate degree requirements outside of the major are in no way impacted by admission to an Accelerated Bachelor's/Master's program.[5]

Shared credits. Undergraduate courses (i.e., courses offered at the 300 level or below) cannot be counted as shared credits nor count towards the master's degree. Up to 50% of the total graduate level credit hours, required in the graduate program, may be counted in meeting both the undergraduate and graduate degree requirements. Of those shared credits, students in an Accelerated Bachelor's/Master's program should begin their graduate program with the standard introductory course(s) for the program whenever possible. So that students may progress through the Accelerated Bachelor's/Master's program in a timely manner, undergraduate programs are encouraged to design their curriculum such that a student can complete some required graduate credit hours while completing the undergraduate degree. For instance, some of the graduate curriculum should also satisfy electives for the undergraduate major.

The program's Graduate Director will designate credit hours to be shared through the advising form and master's degree conferral review process. Shared credit hours will not be marked on the undergraduate record as having a special status in the undergraduate program. They will be included in the student's undergraduate earned hours and GPA. Graduate credit hours taken during the undergraduate program will not be included in the graduate GPA calculation.

1. If students wish to transfer credits from another university to Loyola University Chicago, the program's Graduate director will review the relevant syllabus(es) to determine whether it meets the criteria for a 400 level course or higher.
2. Programs with specialized accreditation requirements that allow programs to offer graduate curriculum to undergraduate students will conform to those specialized accreditation requirements.
3. In rare cases, the Graduate Director may authorize enrollment in a 400-level course for a highly qualified and highly motivated undergraduate, ensuring that the undergraduate's exceptional participation in the graduate class will not diminish in any way the experience of the graduate students regularly enrolled.
4. For example, if a particular course is only offered once every 2-3 years, and a student has demonstrated the necessary ability to be successful, the Graduate Director may allow a student to take a graduate level course to be shared prior to the student being formally admitted to the graduate program. See, also, footnote 3.
5. Students should not, for example, attempt to negotiate themselves out of a writing intensive requirement on the basis of admission to a graduate program.

Graduation

Degrees are awarded sequentially. All details of undergraduate commencement are handled in the ordinary way as for all students in the School/College/Institute. Once in the graduate program, students abide by the graduation deadlines set forth by the graduate program. Students in these programs must be continuously enrolled from undergraduate to graduate degree program unless given explicit permission by their program for a gap year or approved leave of absence. In offering the option of an Accelerated Bachelor's/Master's program, the university is making possible the acceleration of a student's graduate degree completion. It should be understood that students may not request deferral of their matriculation into the Master's degree program. If students would like to delay their graduate studies after earning the undergraduate degree, they may apply for admission to the traditional master's degree program. Any application of graduate credit earned while in the undergraduate program is subject to the policies of the graduate degree granting school.

Learning Outcomes

- 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. [Web Technologies]
- 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. [Web Technologies]
- 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. [Web Technologies]
- Develop programs using fundamental programming constructs, data structures, and algorithms, while demonstrating the ability to choose appropriate solutions and justify their selections. [Web Technologies]
- 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. [Web Technologies]
- Demonstrate knowledge of legal and ethical considerations in information technology and apply technical and ethical solutions. [Web Technologies]
- Evaluate key policies, processes, and ethical decision making involved in the oversight of information technology within an organization in real world case studies. [Information Technology Leadership and Strategy]
- Apply project management principles to ensure successful implementation of core IT functions, such as network management, system administration, infrastructure integration, and mobile computing in coursework. [Information Technology Leadership and Strategy]
- Create business plans that incorporate IT strategies, employing creativity, innovation, and strategic thinking to identify opportunities, address challenges, build strong relationships, and drive organizational success. [Information Technology Leadership and Strategy]

- Analyze key performance indicators (KPIs) to measure the impact of IT management on organizational performance in written assignments and case studies. [Information Technology Leadership and Strategy]