SOFTWARE ENGINEERING (MS), COMBINED BACHELOR'S + MASTER'S DEGREE

The combined Bachelor's + Master's degree programs allow students to complete 12 graduate credit hours while still undergraduates. These 12 graduate credit hours will count toward both the undergraduate and graduate degree programs.

DePaul Undergraduate Degree + Software Engineering (MS)

The Software Engineering (MS) combined degree program is open to all undergraduate majors across the university.

For information on admission criteria and combined degree program structure, see the CDM Graduate Academics Page (https://catalog.depaul.edu/colleges-schools/computing-digital-media/#graduateacademicstext).

Graduate courses for the combined degree program

The combined degree students take at most three graduate courses during their undergraduate degree selected from the following list of graduate courses. Students are encouraged to work with their undergraduate advisor in their home college and the CDM advisor to choose the three courses that best fit the student's background and undergraduate degree.

Artificial Intelligence in Software Engineering Concentration:

Course	Title	Quarter Hours
Take three (3) graduate courses from this list		12
CSC 421	APPLIED ALGORITHMS AND STRUCTURES	
CSC 480	ARTIFICIAL INTELLIGENCE I	
DSC 441	FUNDAMENTALS OF DATA SCIENCE	
SE 433	SOFTWARE TESTING AND QUALITY ASSURANCE	
or SE 441	AI-AUGMENTED SOFTWARE DELIVERY AND OPERATION	
SE 450	OBJECT-ORIENTED SOFTWARE DEVELOPMENT	
SE 475	MANAGING GLOBALLY DISTRIBUTED SOFTWARE DEVELOPMENT	

Real-Time Software and Game Systems Concentration:

Course	Title	Quarter Hours
Take three (3) graduate courses from this list		12
CSC 461	OPTIMIZED C++	
GAM 425	APPLIED 3D GEOMETRY	
GAM 470	RENDERING AND GRAPHICS PROGRAMMING	
(For this concentration, note that GAM 470 must be taken after both CSC 461 and GAM 425.)		

Software Development and Architecture Concentration:

Course	Title	Quarter Hours
Take three (3) graduate courses from this list		12
SE 433	SOFTWARE TESTING AND QUALITY ASSURANCE	
SE 441	AI-AUGMENTED SOFTWARE DELIVERY AND OPERATION	
SE 450	OBJECT-ORIENTED SOFTWARE DEVELOPMENT	
SE 475	MANAGING GLOBALLY DISTRIBUTED SOFTWARE DEVELOPMENT	

Students who want to substitute different graduate courses for courses in the recommended list must discuss the request with their undergraduate advisor in their home college and the CDM advisor. Requests must be approved by the CDM advisor.

In addition to the three graduate courses, students complete the MS in Software Engineering by taking an additional 36 credit hours (9 graduate courses) and any additional introductory courses that were not satisfied during their bachelor's degree. Students will follow the master's degree program requirements for the term they are admitted to the master's degree program.

Prerequisite undergraduate courses:

Students are encouraged to work with their undergraduate advisor in their home college and the CDM advisor to complete appropriate coursework during their undergraduate degree to satisfy the introductory courses of the Master's degree.

The suggested set of undergraduate courses that satisfy the Introductory courses for the MS in Software Engineering degree are listed here:

Artificial Intelligence in Software Engineering Concentration:

- CSC 400 Discrete Structures for Computer Science: MAT 140
- CSC 401 Introduction to Programming: (CSC 241 and CSC 242) or CSC 243
- CSC 402 Data Structures I: CSC 300
- CSC 403 Data Structures II: CSC 301
- IT 403 Statistics and Data Analysis: IT 223

Real-Time Software and Game Systems Concentration:

- CSC 400 Discrete Structures for Computer Science: MAT 140
- CSC 401 Introduction to Programming: (CSC 241 and CSC 242) or CSC 243
- CSC 402 Data Structures I: CSC 300
- CSC 403 Data Structures II: CSC 301
- CSC 406 Systems I: CSC 373
- CSC 407 Systems II: CSC 374

Software Development and Architecture Concentration:

- CSC 400 Discrete Structures for Computer Science: MAT 140
- CSC 401 Introduction to Programming: (CSC 241 and CSC 242) or CSC 243

- CSC 402 Data Structures I: CSC 300
- CSC 403 Data Structures II: CSC 301