

# DUAL M.S. COMPUTER SCIENCE/MASTER OF BUSINESS ADMINISTRATION

The mission of the Dual Degree M.S. in Computer Science/MBA program is to educate working professionals in the computer-science and business disciplines that will make them leaders of complex technical endeavors within their sponsoring organizations.

The dual degree MS/MBA program will confer two degrees upon its graduates: an MBA and an MS in Computer Science. Pursuing the dual degree program reduces a student's total number of required semester hours for the two degrees compared to pursuing the two degrees separately.

The dual degree M.S. in Computer Science/MBA program is designed to be completed in approximately three years. Typically, Computer Science classes are completed first, followed by taking the required classes in the MBA program.

## Learning Outcomes

For the Computer Science M.S.:

Graduates will

- Demonstrate technical skill in advanced computer programming and applications
- Demonstrate deep technical computing skills in at least one specialty area within computer science
- Apply system design and integration skills to effectively integrate software intensive systems throughout their life cycle
- Conduct graduate level research with adequate research skills including information literacy and self-learning
- Utilize project management skills to effectively manage complex software development and integration activities
- Apply state-of-the-art technologies in computing

For the MBA:

Graduates will

- Possess the knowledge and skills to be able to apply key business concepts in organizational settings
- Possess the knowledge and skills to manage in a global economy
- Possess critical thinking skills and the ability to integrate concepts
- Have the ability to communicate effectively
- Have the knowledge and skills to function effectively as members, managers, and leaders in the organizations in which they are employed
- Be able to incorporate ethical reasoning, social responsibility, and sustainability in making decisions in their organizations

## Admission

Both the MBA Program in the College of Business Administration and the M.S. in Computer Science Program in the Frank R. Seaver College of Science and Engineering must accept students applying to the dual degree program for admission. Prospective dual degree students should apply first to the M.S. in Computer Science degree program. After

receiving admission to the M.S. in Computer Science degree program and completing a minimum of #12 semester hours towards the M.S. degree, students interested in the MS/MBA Dual Degree program should contact the#Associate Director of Academic Affairs, Graduate Business Programs for admission to the MBA portion of the Dual Degree.#Eligibility for the dual degree program is based upon good academic standing (minimum GPA 3.0) in the M.S. in Computer Science program and approval from their respective Seaver College academic advisor. The preferred start term for the MBA portion of the Dual Degree program is the fall term.

The M.S. in Computer Science degree program application is online at: <https://graduatestudies.lmu.edu/apply/>.

Applicants must submit:

- Official transcripts from all colleges and universities attended
- Statement of Intent (approximately 1.5 pages) describing the candidate's background, career goals, and interest in the program
- Essay discussing how the two degrees fit into applicant's career development

The undergraduate preparation of all applicants, regardless of their previous degrees, should include the following subject areas:

- Computer Programming (CMSI 1010 Computer Programming and Laboratory)
- Data Structures and Applications (CMSI 2120 Data Structures and Applications)

and at least two of the following:

- Computer Systems Organization (CMSI 2210 Computer Systems Organization)
- Operating Systems (CMSI 3510 Operating Systems)
- Database Systems (CMSI 3520 Database Systems)

These courses need not be taken at Loyola Marymount University. However, the student should make certain that courses taken elsewhere satisfy the above requirements. Applicants who do not have adequate background in Computer Science might be required to take additional undergraduate courses.

Coursework required as part of terms of admission may not be waived.

- Transfer Credit: Students may transfer six (6) semester hours for courses completed at another regionally accredited college or university. Credits to be transferred must be taken prior to admission. Each transferred course grade must be at least B (3.0), and the course must not have been used to satisfy degree requirements at another college or university.

## Graduation Requirements

(60 Semester Hours)

Students enrolled in the Dual Degree MS/MBA Program are jointly advised by their academic advisor for Computer Science in Seaver College and the MBA program Director in the College of Business Administration. It is recommended that incoming students take 12 semester hours of Computer Science courses per fall and spring semester and complete the M.S. in year one of the dual-degree program, then begin the MBA curriculum in year two.

Dual degree students will take a total of 24 semester hours of Computer Science courses and 36 semester hours of MBA courses. 15 semester hours from the Computer Science courses will also count towards the emphasis/concentration requirement for the MBA degree. 6 semester hours of the MBA courses that are taken as part of the MBA coursework will also count toward the M.S. in Computer Science. Separately, the M.S. degree requires 30 semester hours and the MBA degree requires 51 semester hours, for a total of 81 semester hours. The Dual Degree program lessens the load by 21 (15+6) semester hours.

## Suggested Curriculum Flowchart for the M.S. in Computer Science/MBA Dual Degree Program

Code	Title	Semester Hours
<b>Year 1 (Summer, Fall, and Spring)</b>		
Required Core Courses		
CMSI 583	Computability and Complexity	3
CMSI 585	Programming Language Foundations	3
Select one of the following options:		9
<i>Option 1</i>		
Elective		
Elective		
CMSI 694	Graduate Capstone Project	
<i>Option 2</i>		
Elective		
CMSI 695	Master's Thesis I	
CMSI 696	Master's Thesis II	
<i>Option 3</i>		
CMSI 695	Master's Thesis I	
CMSI 696	Master's Thesis II	
CMSI 697	Master's Thesis III	
<i>Elective Courses</i>		
Students may enroll in up to one 500- or 600-level course in another graduate program with consent of academic advisor. 500-level courses taken as an undergraduate may not be repeated for graduate credit. If a 500-level course is cross-listed with a 600-level course, graduate students must enroll in 600-level course.		
Master's Thesis Option <sup>1,2</sup>		
<b>Subtotal</b>		15
<b>Year 2</b>		
<i>Fall Semester</i>		
MBAW 6400	MBA Orientation	0
MBAA 6020	Financial and Managerial Accounting	3
MBAA 6030	Global Economic Structures and Systems	1.5
MBAA 6040	Managing Markets and Customer Relationships	3
MBAA 6050	Managing Operations	1.5
MBAA 6090	Managing Information Systems	3
<i>Spring Semester</i>		
MBAA 6010	Managing People and Organizations	3
MBAA 6060	Strategic Management	3
MBAA 6070	Managing Financial Resources	3
MBAA 6080	Data, Models, and Decisions	3
MBAW 6402	The Elements of Becoming A Strategic Leader	0

<i>Summer Session</i>		
Business & Society Core		3
MBA Elective		3
<i>Spring Semester</i>		
MBAA 6100	Managing International Business	3
MBAW 6307	Management Leadership Workshop: Planning Your Future	0
<i>Summer Session</i>		
MBAI 691	Comparative Management Systems (CMS)	3
<i>Dual Degree Requirement <sup>3</sup></i>		
36 semester hours + 15 semester hours from M.S. in Computer Science, satisfying the MBA degree requirement of 51 semester hours		60
<b>Subtotal</b>		96
<b>Total Semester Hours</b>		<b>111</b>

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Preparation of a master's Thesis is optional and can fulfill up to a maximum of nine semester hours of elective course requirements. The student electing the thesis option (option 2 or option 3 above) must obtain a thesis advisor and the thesis must conform to the Frank R. Seaver College of Science and Engineering requirements. With direction from the academic advisor, a thesis committee will be formed. Typically, the thesis committee consists of the student's thesis advisor, a full-time faculty member from the student's department, and a third member from other than the student's department. The thesis is a report on the results of the student investigation of a problem in computer science under the supervision of the thesis committee, which approves the subject and plan of the thesis and reads and approves the complete manuscript.

2

**Total M.S. Degree Requirement:** 24 semester hours + 6 semester hours from MBA, satisfying the M.S. degree requirement of 30 semester hours

3

**Note:** When the course requirements outlined above are completed, the student must submit an application for degree to be awarded both the MBA and the M.S. in Computer Science.