What is the MBA/Master of Science (MS) in Computer Science Program?

It is a three-year concurrent degree program jointly sponsored by The UCLA Anderson School and UCLA’s Henry Samueli School of Engineering and Applied Sciences. Students successfully completing the program will receive both the Master of Business Administration (MBA) degree and the Master of Science (MS) degree in Computer Science.

Who is it for; why was it established?

The program is for students who desire training both as a manager and as a professional computer scientist. Employees, faculty, and students have recognized the need for both types of training as preparation for the increasing number of positions linking the technical and managerial aspects of computers and information systems. Such training is not normally attainable through most MS programs alone, which are technically oriented, nor from the MBA program alone, which is limited in its technical exposure.

In the past, students who wished to obtain both degrees had to take one after the other, a process that usually took four years. By careful arrangement of the respective curriculums, this program allows students to earn both degrees in three years. The program's concurrent nature also allows students to develop and integrate their skills more effectively than if the degrees were obtained sequentially.

Students who receive both degrees will have considerable career flexibility. They will be particularly well suited for careers in technology management, consulting, information systems design and management, technical sales, systems engineering, and systems analysis.

How are the combined degrees different from the regular MBA and MS degrees?

Although all degree requirements are satisfied by the concurrent curriculum, the concurrent degree program requires eight fewer courses than if the degrees were pursued independently. This is possible because certain courses are accepted for degree credit concurrently by both schools. As such, the program requires 18 ½ management courses (including the 2-unit pre-term Management Foundations course), nine computer science courses, and a two-quarter "joint" Applied Management Research Project, which satisfies both the MBA and the MSCS comprehensive examination requirements.

The MBA courses include Management Foundations (2 units), the MBA Management Core (10 courses, 40 units), the Applied Management Research Project (equivalent to two courses, 8 units), and five advanced electives (20 units) from within the Data,
Operations and Technology Management (DOTM) and/or Information Systems (IS) areas of study. Three management electives (15 units) complete the MBA courses. Of the nine computer science courses required, at least five must be at the graduate level.

The Applied Management Research Project (Mgt. 444A/B) fulfills the comprehensive examination requirement for the MBA and MS (CS) degrees. This is an 8-unit team project of 3-5 students and is typically taken during two quarters together with three other courses each quarter. The project must include a computer technology component that fulfills the comprehensive examination for the CS degree. The courses CS497D/E are graded, but these grades are not included in the calculation of the student's GPA in HSSEAS. In addition to the team Applied Management Research report, each student must write an individual report on his/her role in the Applied Management Research Project, which must include an in-depth analysis of the part of the Applied Management Research Project for which he/she was responsible. This individual report, along with the Applied Management Research report, serves as the comprehensive examination for the MS in Computer Science.

Can students already pursuing one degree or the other switch to the concurrent degree program?

Yes, UCLA students in their first year of either the MBA or MS in Computer Science program may apply to the other degree program. However, there is no guarantee that because an individual is already a student in good standing in one school that he or she will be admitted to the other school.

What are typical qualifications?

Although there are no "cut offs," we expect entering students to have an exceptional undergraduate academic record and strong standardized test scores. Strong potential for management must be evidenced through work experience and/or positions of leadership. Computer Science will consider applicants for this concurrent degree program without them having taken the computer science advanced test.

How do I apply to the MBA/MS in Computer Science Program?

To apply to the program, applicants should request application materials from both The Anderson School and the Henry Samueli School of Engineering and Applied Sciences (HSSEAS). Applicants must take the Graduate Management Admission Test (GMAT) and the Graduate Record Examination (GRE) General Test. Separate admissions committees from each school make admissions decisions for the concurrent degree program, and applicants must be offered admission to both schools to be admitted to the combined program.
The Program:

Table 1 presents a sample schedule showing the courses required under the program. Table 2 lists the required and elective courses under their respective headings. The Tables 1 and 2 show that in the first year, students complete the MBA core, while also gaining basic knowledge of computer programming and software through the lower level computer science courses. The computer science breadth requirements must be satisfied if the student’s background is not adequate in this area. The second and third year courses build on the foundation gained in the first year and may be altered in some cases to meet the needs and previous experience of a particular student.

The two-quarter Applied Management Research Project is the final, professional requirement of the UCLA MBA Program. Teams of three to five students complete an original applied research project that integrates and expands students’ capacity to solve complex business problems. MBA/MSCS students must structure their Applied Management Research projects also to integrate their technical and managerial knowledge. Students must focus the information/computer technology portion of the project so that it is within the scope of the computer science course program. As stated above, the Applied Management Research Project satisfies the comprehensive examination requirement for the MBA and the MSCS degrees.

Since many second and third year courses cover both technical and managerial issues, concurrent enrollment in both departments allows the student to integrate material more easily and meaningfully than if the degrees were pursued separately.

How can further information on the MBA/MS in Computer Science Program be obtained?

Group information sessions are offered at The Anderson School several times a week. To schedule an appointment, call (310) 825-6944. For further information, contact the following representatives:

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The UCLA Anderson School of Management  
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Faculty Advisors available for further consultation are:

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The Anderson School  
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**Alfonso F. Cardenas**  
Professor HSSEAS-Computer Science  
3732E Boelter Hall  
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cardenas@cs.ucla.edu

**John Mamer**  
Professor, Policy and DOTM  
Cornell Hall D518  
The Anderson School  
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john.mamer@anderson.ucla.edu

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TABLE 1
SAMPLE PLAN OF STUDY

FIRST YEAR

Pre-Term:  Mgt. 414A/Leadership Foundations

Fall Quarter
Mgt. 402/Data Analysis, Statistics, and Decision Making
Mgt. 403/Managerial Accounting
Mgt. 405/Managerial Economics
Mgt. 408/Financial Markets
Mgt. 411A/Marketing Management

Winter Quarter
Mgt. 410/Operations Technology Management
Mgt. 411B/Marketing Management II
Mgt. 430/Corporate Finance

Spring Quarter
CS 111/*Operating Systems Principles OR
CS 131/*Programming Languages
CS 143/*Introduction to Database Systems
Mgt. 409/Managing and Leading Organizations
Mgt. 420/Business Strategy

SECOND YEAR

Fall Quarter
Mgt. Advanced Elective from DOTM or IS Areas of Study
CS 2XX (e.g. CS 241A/Object Oriented and Semantic Database Systems, OR
CS 245A/Intelligent Information Systems)
CS 180/Introduction to Algorithms & Complexity OR
CS 112/Computer System Modeling Fundamentals

Winter Quarter
Mgt. Advanced Elective from DOTM or IS Areas of Study
CS 2XX/Elective
CS 118/Computer Network Fundamentals OR
CS 151B/Computer System Architecture II
Mgt. Elective

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*More advanced courses may be substituted, based upon prior course work and/or experience. In general, any course previously covered formally may be substituted by a more advanced course.

**Spring Quarter**
Mgt. Advanced Elective from DOTM or IS Areas of Study
Mgt. Elective
CS 2XX (e.g. CS 240A Databases and Knowledge Bases OR CS 245A Intelligent Information Systems)

**THIRD YEAR**

**Fall Quarter**
Mgt. Elective
Mgt. 444A/Applied Management Research Project/CS 497D/Field Project

**Winter Quarter**
Mgt. 444B/Applied Management Research Project/CS 497E/Field Project
Mgt. Elective
CS 2XX (e.g. CS 244A/Distributed Database Systems)

**Spring Quarter**
CS 2XX/Elective
Mgt. Elective
**REQUIRED AND ELECTIVE COURSES LISTED UNDER EACH SCHOOL**

<table>
<thead>
<tr>
<th>Anderson</th>
<th>Joint</th>
<th>Computer Science</th>
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<tbody>
<tr>
<td>Mgt. Core</td>
<td>DOTM and IS Courses</td>
<td>Mgt. Electives</td>
</tr>
<tr>
<td>414 Management Foundations (2 units)</td>
<td>Any five graduate courses</td>
<td>Any three graduate courses</td>
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<td>430</td>
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<tr>
<td>Total # of Courses: 10+ Management Foundations</td>
<td>5</td>
<td>3</td>
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<tr>
<td>18 1/2 Courses in Management</td>
<td>2 joint courses</td>
<td>9 courses in CS</td>
</tr>
</tbody>
</table>

*In order to complete the MS/MBA program, the computer science breadth requirement for an MS in Computer Science must be satisfied by certifying equivalent knowledge or completing courses equivalent to the following:

- CS 143 or CS 180, CS 151A, CS 151B, CS 181, and
- 2 courses from the group CS 111, CS 112, CS 118, CS 131 or 132, CS 161 or 163 or 168, CS 171 or 174, CS 172 or 173.

** CS 201 Seminar to be complete for credit with grade S (satisfactory), not included in the count of required courses.