Bachelor of Science (BS) in Computer Science

*IFDM Fine Arts Minor*

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**Academic Advisors**

**Department of Computer Science**

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Office: ECE 133

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[www.cs.unm.edu/](http://www.cs.unm.edu/)

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Revised August 25 2017
BS in Computer Science with IFDM Distributed Minor in Fine Arts

1. Consult the UNM Catalog for specific Core Curriculum courses.
2. PHIL 156 is not acceptable for the Core Writing & Speaking requirement.
3. Four (3 or more credit) science courses taken by science and engineering majors, two of which must come from one of the following sequences, including the laboratories. The remaining hours can be more advanced courses in the discipline chosen for the sequence or they can be additional introductory science hours.

Astronomy 270 + 270L, 271 + 271L
Biology 201L, 202L (requires Chemistry 121/123L and 122/124L as prerequisites)
Chemistry 121/123L, 122/124L
Physics 160 + 160L, 161 + 161L
E&PS 101 + 105L, 201L, or Environmental Science 101 + 102L, E&PS 201L

4. Students must declare a major.
5. Students may not use both E&PS and Environmental Science introduction courses to complete the science requirement. Physics is recommended. Laboratory science courses other than those above are subject to the approval of the CS advisor. They must be at least at a level such that majors in that discipline would earn credit in the course, and must have substantial laboratory content.
6. CS 105L Introduction to Computer Programming is strongly recommended as preparation for CS 152.

PREMAJOR ADMISSION
If you have not completed all the course requirements for Department Admission, you may be eligible for Pre-Major Admission. If you have completed Math 150 (Pre-Calculus) and Math 123 (Trigonometry) or Math 162 (Calculus), please speak with an academic advisor in the Engineering Student Services Office, Room 2080, Centennial Engineering Center.

DEPARTMENT ADMISSION
1. A minimum of 26 hours of credit acceptable toward the degree with a grade of C or better in all courses and an overall academic average for all courses taken at the University of New Mexico of not less than 2.20.
   Completion of English 101 with a C or better must be included in the 26 hours.
2. Of the 26 hours, 18 credit hours must be taken from computer science, mathematics and laboratory science with grades of C or better, except as noted below, and a cumulative GPA of 2.5 or above. Additional admission requirements and limitations for the School of Engineering are outlined in the UNM catalog.
3. Completion of the following courses with a grade of B- or better: CS 152, Computer Programming Fundamentals; Math 162, Calculus I.

NOTE: All students must see an advisor prior to registering each semester. The main office of the Computer Science Department is located on the first floor of the Farris Engineering Center.
### FIRST YEAR

<table>
<thead>
<tr>
<th>Course #</th>
<th>Cr</th>
<th>Course #</th>
<th>Cr</th>
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</thead>
<tbody>
<tr>
<td>CS 152L: Comp Prog Fund(^{(1)})</td>
<td>3</td>
<td>MATH 163: Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 162: Calculus I</td>
<td>4</td>
<td>CS 251L: Intermediate Program</td>
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<tr>
<td>Lab Science I(^{(3)})</td>
<td>4</td>
<td>Lab Science II(^{(3)})</td>
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<tr>
<td>ENGL 110: Accel Composition(^{(2)})</td>
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<td>CS 261: Math Foundations of CS</td>
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<td>ENGL 120: Composition III</td>
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### SECOND YEAR

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<tbody>
<tr>
<td>ECE 238L: Comp Logic Design(^{(4)})</td>
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<td>CS 351L: Design Large Program</td>
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<tr>
<td>CS 241L: Data Organization</td>
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<td>Lecture Science IV(^{(3)})</td>
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<td>CS 293: Soc/Ethic Issues Comp</td>
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<td>Core/Writing &amp; Speaking(^{(5)})</td>
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<tr>
<td>Math 314 or 321: Linear Algebra</td>
<td>3</td>
<td>Core/Social Science</td>
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<tr>
<td>Lecture Science III(^{(3)})</td>
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<td>Core/Fine Arts</td>
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### THIRD YEAR

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<tr>
<td>CS 375: Intro to Numerical Comp</td>
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<td>CS 357L: Declarative Prog</td>
<td>3</td>
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<tr>
<td>STAT 345: Elements Math Stats Prob</td>
<td>3</td>
<td>CS 362L: Data Struct/Algorithms II</td>
<td>3</td>
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<td>CS 361L: Data Struct/Algorithms I</td>
<td>3</td>
<td>CS Elective</td>
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<tr>
<td>Minor Elective(^{(6)})</td>
<td>3</td>
<td>Minor Elective(^{(6)})</td>
<td>3</td>
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<tr>
<td>Core/Humanities</td>
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<td>Core/Second Language</td>
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### FOURTH YEAR

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<tbody>
<tr>
<td>CS 341L: Intro to Comp Systems</td>
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<td>CS 460: Software Engineering</td>
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<tr>
<td>CS Elective</td>
<td>3</td>
<td>CS 481: Dig Comp Oper Systems</td>
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<td>CS Elective</td>
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<td>Minor Elective(^{(6)})</td>
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<tr>
<td><strong>Total</strong></td>
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<td><strong>Total</strong></td>
<td>14</td>
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**NOTE:** See list of approved UNM Core Curriculum Courses for Computer Science.
1. Either CS 105L (Introduction to Computer Programming) or CS 108L (CS for All: Intro to Computational Science and Modeling) are **required** as a pre-requisite course for CS 152L. **NOTE:** CS 105L or 108L do not count as programming courses towards the Computer Science degree (120 credit hours)

2. ENGL 111&112 sequence or ENGL 113 will also meet the ENGL 110 requirement

3. Four Science courses (3 or more credit hours, 14 credits total) that apply toward a science or engineering degree, two of which must be in the same subject, in sequence with their labs chosen from the list below. The additional 2 science classes can be more advanced courses in the chosen subject or they can be chosen from the list below.
   - EPS 101/105L & EPS 201L or ENVS 101/102L & EPS 201L
   - CHEM 121 & CHEM 123L, & CHEM 122 & CHEM 124L (must take Chem Placement Assessment www.aleks.com)
   - BIOL 201 & BIOL 202 (check CHEM prerequisites)
   - PHYC 160 & PHYC 160L (recommend Math 163 co-req), & PHYC 161 & PHYC 161L (check MATH prerequisites)
   - ASTR 270 & ASTR 270L, & ASTR 271 & ASTR 271L (check MATH and PHYC prerequisites)

**Important Science Note:** Students **may not use both** EPS and ENVS introductory courses to complete a science requirement. Physics is recommended.

4. CS152L is a prerequisite for ECE 238L. **No need to take ECE 131 as a CS Major**

5. CJ 130, ENGL 219 or ENGL 220 will satisfy the Core Writing/Speaking elective.

6. Students must declare a minor through the CS department

To comply with the ADA and Rehabilitation Act of 1973, persons having special needs and requiring auxiliary aid or service should contact the Accessibility Resource Center (ARC) and the Computer Science Department.

**GENERAL Pre-Major CS ADMISSION**

If you have not completed all the course requirements for Department Admission, you will be admitted as a Pre-Major CS student. Please speak with a CS Academic Advisor in Electrical & Computer Engineering (ECE) Bldg. #046 (on UNM Map), Room 133, (505) 277-3112 csinfo@cs.unm.edu if you are interested in being admitted to the Pre-Major CS degree program.

**DEPARTMENT ADMISSION CRITERIA**

1. A minimum of 26 hours of credit acceptable toward the degree with a grade of C or better in all courses and an overall academic average for all courses taken at the University of New Mexico of not less than 2.20. Completion of English 101 with a C or better must be included in the 26 hours.

2. Of the 26 hours, 18 credit hours must be taken from computer science, mathematics, and laboratory science with grades of C or better, except as noted below, and a cumulative GPA of 2.5 or above. Additional admission requirements and limitations for the School of Engineering are outlined in the UNM catalog.

3. Must complete the following courses with a **grade of B- or better**: CS152L, Computer Programming Fundamentals; and, Math 162, Calculus I.

**NOTE:** All CS students must see an advisor prior to registering each semester
Restricted to Computer Science majors in the IFDM program

Name: ___________________________  UNM ID#: ___________________________

Catalog Used: 2016-2017

UNM reserves the right to make changes in the curricula and degree requirements as deemed necessary, with the changes being applicable to currently enrolled students.

Students must earn a grade of C (not C-) or better in all classes to meet requirements for the minor.

The requirements to earn a distributed minor in Fine Arts are as follows (41 hours TOTAL):

a. **29 hours** in IFDM Core:

   - IFDM 205L - Studio I: Activating Digital Space
   - CS 105L - Intro. to Computer Programming and/or CS 152L - Computer Programming Fundamentals
   - IFDM 300 - Critical Intermediations
   - IFDM 310 - Studio II: Writing Digital Narrative
   - IFDM 400 - Ethics, Science and Technology
   - IFDM 450 - IFDM Capstone I Senior Projects Course
   - IFDM 410 - The Business and Law of Film and New Media
   - IFDM 451 - IFDM Capstone II Senior Projects Course

b. **12 hours** in Fine Arts Electives selected from the following:

   - ARTH 201 - History of Art I
   - ARTH 202 - History of Art II
   - ARTH 250 - Modern Art
   - ARTH 252 - Contemporary Art & New Media
   - ARTH 427 - Contemporary Photography
   - ARTS 106 - Drawing I
   - ARTS 125 - Art Practices I
   - ARTS 289 - Digital Imaging Techniques
   - ARTS 330 - Intermediate Electronic Art
   - MA 111 - Technical Introduction to Video Production
   - MA 210 - Introduction to Film Studies
   - MA 390 - Topics in the Elements of Filmmaking
   - MA 409 - Advanced Video Art
   - MUS 380 - Recording Techniques I (NOTE: This course is only offered for 2 credit hours)
   - THEA 196 - Introduction to Stage Lighting
   - THEA 397 - Sound for Performance
   - THEA 458 - Screenwriting

### Distributed Minor in FA - 41 hours

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course</th>
<th>Hours</th>
<th>Grade</th>
</tr>
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<tbody>
<tr>
<td>Fall</td>
<td>IFDM 205L (to satisfy Fine Arts core)</td>
<td>3</td>
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<tr>
<td>Fall</td>
<td>CS 105L or CS 152L</td>
<td>3</td>
<td></td>
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<tr>
<td>Spring</td>
<td>IFDM 210</td>
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<tr>
<td>Fall</td>
<td>IFDM 300 (to partially satisfy Humanities core)</td>
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<tr>
<td>Spring</td>
<td>IFDM 310 (to partially satisfy Wrtg/Spkg core)</td>
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<tr>
<td>Fall</td>
<td>IFDM 400 (to satisfy Social/Behavioral core)</td>
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<tr>
<td>Fall</td>
<td>IFDM 450</td>
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<tr>
<td>Spring</td>
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<tr>
<td>Spring</td>
<td>IFDM 451</td>
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12 hours of Fine Arts electives chosen from: ARTH 201, 202, 250, 252, 427; ARTS 106, 125, 289, 330; MA 111, 210, 390, or 409; MUS 380; THEA 196, 397, 458

Questions? Contact the CFA Student Success & Advisement Ctr, room 1103 in the Center for the Arts or call 505.277.4817

Edited 4.6.17