MICHIGAN STATE UNIVERSITY | Lyman Briggs College

# BACHELOR OF SCIENCE DEGREE
# COMPUTER SCIENCE (LBC)

**FOR ADDITIONAL INFORMATION, PLEASE CONTACT THE LYMAN BRIGGS ADVISING OFFICE**

**Students must meet admissions criteria as set by the CSE department to take courses in this curriculum. For additional information please contact the Computer Science and Engineering Advising Office**

**(1) UNIVERSITY REQUIREMENTS**

*Writing Requirement*
Tier I: LB 133 4
Tier II: Satisfied by completing the Lyman Briggs College History, Philosophy and Sociology of Science and Senior requirements listed below.

*Integrative Studies in Arts & Humanities (IAH)*
IAH 201-210* 4
IAH 211-241*†# 4

*Integrative Studies in Social, Behavioral & Economic Sciences (ISS)*
ISS 200-level course* 4
ISS 300-level course*‡@ 4

*National, International, & Multicultural Diversity
Students must include at least one "N" course and one "I" course in their Integrative Studies programs. A "D" course may meet either an "N" or an "I" requirement, but not both.

†Summer 2013 to Summer 2017: LB 331, 333, and 336 will fulfill the IAH "B" university requirement (IAH 211 or higher). Please consult your LBC Academic Advisor for specific details for your program.

‡Summer 2013 to Summer 2017; LB 332, 334, and 335 will fulfill the ISS 300-level university requirement. Please consult your LBC Academic Advisor for specific details for your program.

# Beginning Fall 2017; LB 321a, 322a, 323a, 324a, 325a, 326a and 327a will fulfill the IAH university requirement (IAH 211 or higher).

@ Beginning Fall 2017; LB 321b, 322b, 323b, 324b, 325b, 326b and 327b will fulfill the ISS 300-level university requirement.

**(2) LYMAN BRIGGS COLLEGE REQUIREMENTS**

*Biological Sciences (9 cr.)*
Complete ONE of the following groups of courses
(1) LB 144 & 145 9
(2) BS 161, 162, 171, & 172 10

*Chemistry (8-9 cr.)*
Complete ONE of the following groups of courses
(1) LB 171, 171L, 172, & 172L 9
(2) CEM 141, 142, & 161 8
(3) CEM 151, 152, & 161 8

*Physics (8 cr.)*
Complete ONE of the following groups of courses
(1) LB 273, 274* 8
(2) PHY 183 & 184* 8

*Mathematics (6-7 cr.)*
Complete ONE of the following groups of courses
(1) LB 118 & 119* 8
(2) MTH 132 & 133* 7

*History, Philosophy & Sociology of Science (11-12 cr.)*
LB 133 4
LB 321-327, 330-336, 355, 490E; ENG 473A; HST 425; SOC 368 7-8

*Senior Seminar (4 cr.)*
LB 492 4

*Physics and Mathematics courses also meet graduation requirements for major

Minimum number of credits required: 120

Minimum cumulative and major grade point average: 2.0

**(3) MAJOR REQUIREMENTS**

Complete ALL of the following courses (28 cr.)

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|---|---|---|---|
| CSE | 231 | Introduction to Programming I | 4 |
| CSE | 232 | Introduction to Programming II | 4 |
| CSE | 260 | Discrete Structures in Computer Science | 4 |
| CSE | 320 | Computer Organization and Architecture | 3 |
| CSE | 331 | Algorithms & Data Structures | 3 |
| CSE | 410 | Operating Systems | 3 |
| CSE | 460 | Compatibility and Formal Language Theory | 3 |
| LB | 220 | Calculus III | 4 |

Complete a minimum of TWO of the following courses (6 cr.)

| | | | |
|---|---|---|---|
| CSE | 420 | Computer Architecture | 3 |
| CSE | 422 | Computer Networks | 3 |
| CSE | 435 | Software Engineering | 3 |
| CSE | 440 | Introduction to Artificial Intelligence | 3 |
| CSE | 450 | Translation of Programming Languages | 3 |
| CSE | 452 | Organization of Programming Languages | 3 |
| CSE | 472 | Computer Graphics | 3 |
| CSE | 480 | Database Systems | 3 |

**IMPORTANT: This advising guide is presented for planning purposes only. It is the student's responsibility for knowing and following University, college and departmental requirements as stated in the** Academic Programs Catalog**.**

**The Academic Advisors will provide information and suggest others based on expressed interests. It is the student's responsibility for enrolling in classes and selecting the number of credits per semester for success. Appointments are made using the** Student Success Dashboard**.**