

COMPUTER SCIENCE

Create and maintain computer and information technologies so the rest of us can live better lives.

The Bachelor of Science degree with a major in computer science is currently offered at all Lakeland University centers. Most courses are also offered BlendEd®.

Central Wisconsin Center
715.422.5418 / 800.522.9473
centralwi@lakeland.edu

Chippewa Valley Center
715.723.2720 / 800.993.3413
chippewavalley@lakeland.edu

Fox Cities Center
920.727.0777 / 888.942.4444
foxcities@lakeland.edu

Green Bay Center
920.336.7170 / 888.861.8255
greenbay@lakeland.edu

Madison Center
608.244.2725 / 800.589.5134
madison@lakeland.edu

Milwaukee Center
414.476.6565 / 800.421.2949
milwaukee@lakeland.edu

Sheboygan Center
920.565.1047 / 800.569.2166
sheboygan@lakeland.edu



Computers have become such an essential part of our lives that most of us no longer think about them. We expect that they will be there – streamlining our workplace, accessing our information and providing our entertainment. That's where computer science graduates come in: they create and maintain computer and information technologies so the rest of us can live better lives.

The computer science major enables students to position themselves “inside” the already-accomplished computer revolution. Majors are presented with a practical background in programming and data management, as well as the skills that will allow them to devise and implement computer solutions to real-world problems. At the upper levels of coursework, students use electives to guide and focus their own studies, preparing themselves for careers in applications programming, information technology and systems management.

REQUIRED COURSEWORK

(57 SEMESTER HOURS)

All courses listed are 3 semester hours.

| | |
|---------|---|
| CPS 200 | Programming I |
| CPS 210 | Database Basics |
| CPS 212 | Programming II |
| CPS 362 | Introduction to Data Structures |
| CPS 442 | Database Management, Warehousing and Mining |
| CPS 445 | Systems Analysis and Design (Writing Intensive) |
| MAT 250 | Discrete Mathematics |

Students must select and successfully complete one of the following emphases:

COMPUTER SCIENCE

At least 24 semester hours from the following:

| | |
|---------|---------------------------------------|
| CPS 221 | COBOL Programming |
| CPS 250 | Information Security & Forensics I |
| CPS 280 | Special Topics in Computer Science |
| CPS 313 | Advanced Programming |
| CPS 314 | Programming Languages |
| CPS 315 | Object-Oriented Programming I |
| CPS 316 | Object-Oriented Programming II |
| CPS 323 | Computer Architecture |
| CPS 325 | Networking and Telecommunications |
| CPS 420 | Operating Systems |
| CPS 425 | Artificial Intelligence |
| CPS 435 | Mobile Application Development |
| CPS 450 | Information Security and Forensics II |
| CPS 452 | Information Technology Project Mgmt. |
| CPS 455 | Predictive Analytics |
| CPS 480 | Special Topics in Computer Science |

Up to 4 semester hours from the following courses:

| | |
|---------|--------------------------------|
| BUS 301 | Management Information Systems |
| MAT 370 | Numerical Analysis |
| | A Foreign Language |

INFORMATION SYSTEMS

Completion of at least 9 semester hours from the “Computer Science” emphasis not to include the courses below.

| | |
|---------|--|
| BUS 301 | Management Information Systems |
| CPS 221 | COBOL Programming -OR- CPS 314 Programming Languages |
| CPS 315 | Object-Oriented Programming I |
| CPS 452 | Information Technology Project Management |
| CPS 455 | Predictive Analytics |

SOFTWARE DESIGN

Completion of at least 9 semester hours from the “Computer Science” emphasis not to include the courses below.

| | |
|---------|---|
| CPS 221 | COBOL Programming -OR- CPS 313 Advanced Programming |
| CPS 314 | Programming Languages |
| CPS 315 | Object-Oriented Programming I |
| CPS 316 | Object-Oriented Programming II |
| CPS 435 | Mobile Application Development |



DEGREE REQUIREMENTS

(Up to 41 semester hours)

DISTRIBUTIONAL STUDIES

RHETORICAL DEVELOPMENT

- GEN 110 Composition I: Academic Writing
GEN 112 Composition II: Argumentation and Research

QUANTITATIVE SKILLS

- MAT 130 Intermediate Algebra
or
MAT 150 Statistics for Everyday Life

INTERDISCIPLINARY STUDIES

- GEN 130 General Studies Core I: Knowing the Self
(Exempt with at least 30 transfer credits)
GEN 3XX General Studies Core II: Exploring the Human Condition
(Exempt with at least 90 transfer credits)
GEN 4XX General Studies Core III: Shaping the Future

SELECT A MINIMUM OF 3 SEMESTER HOURS FROM 7 OF THE 8 FOLLOWING CATEGORIES:

Art, Music and Theatre (ART, MUS, THE)

History and Political Science (HIS, POL)

Literature and Writing (ENG, WRT)
Excludes WRT 110 and WRT 210

Mathematics (MAT)
Excludes MAT 130 and MAT 150

Natural Sciences (BIO, CHM, PHY and GEN 183)

Philosophy and Religion (PHI, REL)

Social Sciences (ANT, CRJ, ECN, SOC, PSY)
Excludes SOCP 335

World Languages (CHI, GER, JPS, SPA or other)

Upon completion of the requirements for the Bachelor of Arts degree through the Lakeland University evening, weekend and online program, degree-earning students will have

- earned at least 120 semester hours of college credit, with a minimum of 30 semester hours having been completed through Lakeland University;
- satisfied the requirements of at least one academic major;
- completed the General Studies requirements; and
- maintained a cumulative 2.0 grade point average in both the major and in all coursework taken through Lakeland University.

The Lakeland University evening, weekend and online program's liberal arts component enables students to develop the necessary skills and knowledge to communicate clearly, inquire methodically, evaluate rationally and reason validly. These skills are developed through courses in:

- Distributional Studies, which develop knowledge in areas outside the major; and
- Interdisciplinary Studies, which encourage the integration of knowledge and values.