

# Computer Science

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

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

#### Central Wisconsin Center

800.522.9473  
centralwi@lakeland.edu

#### Chippewa Valley Center

800.993.3413  
chippewavalley@lakeland.edu

#### Fox Cities Center

888.942.4444  
foxcities@lakeland.edu

#### Green Bay Center

888.861.8255  
greenbay@lakeland.edu

#### Madison Center

800.589.5134  
madison@lakeland.edu

#### Milwaukee Center

800.421.2949  
milwaukee@lakeland.edu

#### Sheboygan Center

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 (45 - 46 semester hours)

*All courses listed are 3 semester hours unless otherwise indicated.*

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

*Complete one of the following areas of emphasis:*

#### Computer Science Emphasis

*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 four (4) semester hours from the following non-CPS courses:*

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

#### Information Systems Emphasis

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

*The completion of a minimum of 9 semester hours from the “Computer Science” emphasis, not to include the above courses.*

#### Software Design Emphasis

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

*The completion of a minimum of 9 semester hours from the “Computer Science” emphasis, not to include the above courses.*

Also available as a minor

For more information, visit [lakeland.edu/adult](http://lakeland.edu/adult).



# General Studies 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

### SELECT A MINIMUM OF 3 CREDITS 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)

## 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

Upon completion of the requirements for the Bachelor of Arts degree through the Lakeland College 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 College;
- 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 College.

The Lakeland College 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.