# Washburn University Bachelor of Arts in Computer Information Science 

## Program Requirements CIS (40 Total)

Core - 13 hours
CM111 Intro to Structured Programming (4)
CM231 Computer Organization/Assembler (3)
CM245 Contemporary Programming Methods (3)
CM261 Networked Systems (3) (F)
Required - 21 hours
CM307 Data Structs. \& Alg. Analysis (3)
CM322 Operating Systems (3) (F)
CM331 Artificial Intelligence (3) (S)
OR CM332 Data Mining (3) (F)
CM333 Software Engineering (3) (F)
CM336 Database Management Systems (3) (S) CM361 Introduction to Cybersecurity (3) (S) CM465 CIS Capstone Project (3)
CM Electives - 6 hours
Courses should be selected in consultation with a department advisor. All 6 hours must be upper division.

## Program Requirements Non-CIS (24-26 total)

MA140 Statistics (*MA *SL) (3)
MA151 Calculus \& Analytic Geometry I (*MA) (5)
OR MA141 Applied Calculus (*MA) (3)
MA206 Discrete Mathematics for Computing (*MA) (3)
PH220 Symbolic Logic (*HU) (3)
EC200 Principles of Microeconomics (*SS) (3)
EC201 Principles of Macroeconomics (*SS) (3)
CN340 Interviewing (3)
OR CN341 Persuasive Speaking (*HU) (3) (S)
OR CN342 Communication-Team and Groups(*HU) (3) (F)
BU342 Organization and Management (3)
OR BU346 Organizational Behavior (3)

## General Education Requirements (35 Total)

Composition - 6 hours
EN 101 Introductory College Writing (3)
EN 200 Intermediate College Writing (3)
Math (*MA) - 3 hours
MA112 or higher
Communication Studies - $\mathbf{3}$ hours
CN101 or CN150 or CN351
Natural Science (with Lab) - 5 hours

Social Sciences (*SS) - 6 hours
Two disciplines
Humanities (*HU) - $\mathbf{6}$ hours
Two disciplines
Institutionally Designated (Two disciplines) - 6 hours
Inclusion and Belonging (*IB) - 3 hours
Scientific Reasoning and Literacy ( $*$ SL) -3 hours

## Degree Requirements ( 14 total)

Modern Language
ML101 (4)
ML102 (4)

WU101 The Washburn Experience (3)
EN300 Advanced College Writing (3)
OR EN308 Technical Writing (3)

For a complete listing of the requirements for the bachelor's degree, please consult the University catalog. Although you, the student, are ultimately responsible for ensuring that the minimum degree requirements are met, you should choose a departmental advisor during your freshman year to assist you.

## Notes:

1. Of the minimum $\mathbf{1 2 0}$ hours required to graduate, $\mathbf{8 0}$ hours must be outside your major.
2. Of the minimum $\mathbf{1 2 0}$ hours required to graduate, $\mathbf{9 9}$ hours must be College of Arts $\boldsymbol{\&}$ Sciences credits.
3. You must take at least $\mathbf{4 5}$ hours of upper-division coursework (numbered 300 or above).
4. No course required for the degree (major, minor, or correlated) may be taken pass/fail and a grade of $\mathbf{C}$ or better is required.
5. Transfer students must take at least $\mathbf{9}$ hours of upper-division CM courses from Washburn. Transfer hours in your major must be approved by the Department. At least $25 \%$ of credit hours required for the major must be taken at Washburn.
