

# Curriculum for BA in Computing and Informatics



CS Learning Community ("LiBBy")

Intro to Object Oriented Programming

Intro to Scientific Programming or Intro to Programming Using Robots or Creating Android Applications

Computer Science and Programming

Intro to Symbolic Logic or Discrete Structures

Gen Ed Math

Statistics I  
Calculus T&A  
Calculus I

Quantitative Literacy

Humanistic Literacy  
Writing Intensive

Computers and Society

Data Communications and Networking

Intro to Comp NW & Data Comm

Object Oriented Programming and Data Abstraction counts for 1 APW  
Programming Languages counts for 1 APW

Advanced Programming Workshop or Advanced Programming Workshop  
Two workshops on different topics required

Database Systems: Theory and Programming

Applied Database Technologies

Data Structures and Algorithms

Principles of Data Structures

**Security**

- Foundations Computer Forensics
- Ethical Hacking Fundamentals
- Penetration Testing Fundamentals
- Fundamentals of NW Security
- Principles NW Security
- Cyber Security: Fundamentals, Principles and Apps
- Principles of Information Security

**Blockchain**

- Blockchain Applications
- Cryptography and Blockchain Essentials
- Blockchain Programming

Big Data Tools and Techniaues

Web Programming

Intro to Web Development

Public Speaking

C&I Capstone Experience

Human-Computer Interaction

**Mobile**

- Intro to Android Programming
- Advanced Android Programming
- Intro to IOS Programming
- Advanced IOS Programming
- Topics Mobile Programming

Systems Administration

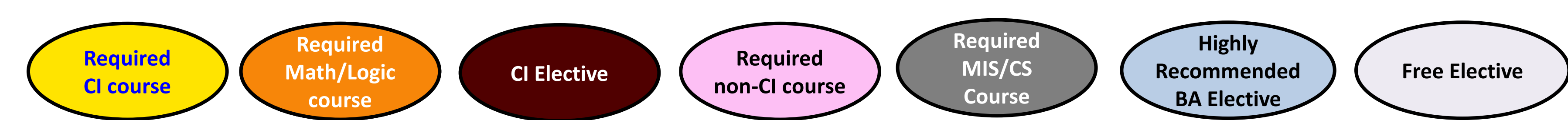
Concepts of Computing Technologies

Web Server Platforms

Other Electives

- BINF 07.250 - Introduction to Bioinformatics (3 s.h.)
- GEOG 16.160 - Intro to Mapping / Geographic Info Science (3 s.h.)
- GEOG 16.260 - Geographic Info Science I (3 s.h.)
- GEOG 16.261 - Cartography (3 s.h.)
- MIS 02-325 - Project Management (3 s.h.)
- Any Computer Science course at or above the 200 level not used to fulfill a different B.A. Computing and Informatics requirement and for which a student has completed all necessary pre-requisites (3 s.h.)
- Other courses at or above the 200 level by permission of faculty advisor

Artistic Literacy



Corresponding BS Equivalent



Developed by: Department of Computer Science, 03-Feb-2021