

## Fall 2017:

Computer Science Orientation: This class was an 8-week orientation to get us used to the school's department, our final project was actually to build a LeJOS robot that could autonomously navigate a maze.

Introduction to Software Development: This class was an introduction to programming in Java, we learned about basic concepts of programming and tested out our programs audibly with a software called JMusic.

## Spring 2018:

Algorithms and Data Structures: Another course that was taught in Java, in this class we learned a lot about different data structure and object orientation. One of the biggest skills I gained from this class was a sense as to how to make my programs more efficient.

Discrete Mathematics I: The outcome of this course was to help us learn to formulate problems in mathematical terms and concepts such as functions, relations, graphs, trees, and Boolean logic, which are conducive to methodical problem-solving. I learned a lot on how to approach problems logically, and how to formulate mathematical proofs.

## Fall 2018:

Computer Architecture: This is an introductory course on computer organization and computer systems. Find our class website [here](#). This class taught us how to Design combinational and sequential logic circuits, and understand and identify the components, and their interactions. We also built our own CPU. We learned how compilers generate machine code for simple C programs, and how to improve performance of C programs through basic code optimization techniques.

Software Engineering: You can look [here](#) to see our class website and what we were up to. In this class, we learned more about the C programming language, including things like syntax and memory management. We also studied topics in Java a bit more deeply, and refined our skills in object oriented coding, concurrency, and overall design.

Discrete Mathematics II: Click [here](#) to access our class website. This course was a continuation of Discrete Mathematics I, and solidified our skills in how to develop an understanding of how to read and construct valid mathematical statements, arguments, and an understanding mathematical theorems.

## **Spring 2019:**

Software Design for Handheld Devices: This class is a continuation of my software engineering education. In this course, we learn how to code and design Android-based applications in Kotlin.

Database Systems: View our class website [here](#) to access our class website. In this course we learned how to design and evaluate relational database schemas,, understand formal relational query languages, understand and write queries in SQL, program in SQL using commercial relational database management systems, build web applications, including both frontend and backend development, and use different types of database systems to solve real world problems. It also strengthened our ability to work in teams to design, program, integrate and test a database application, improved our technical writing skills, and in giving oral presentations and demonstrations of our work.

Systems Programming: View our class webpage [here](#) to access our class website. This course examined the concepts underlying all computer systems. Processor operation, hierarchical memory systems, embedded boards, data acquisition, actuation, and systems software such as compilers, linkers, and operating systems from the programmer's perspective. Use of embedded platforms to examine how programs interact with and are constrained by hardware.

## **Fall 2019:**

Operating Systems: View our class page [here](#) to see what we're doing this semester!

Algorithms: View our class page [here](#) to see what we're doing this semester!

Foundations of Computing: The main focus of this course is to take a deep dive into computing principles rather than computer technologies. We learn the ideas that underly all technologies, and how they are always evolving despite the basic principles staying the same.