

# 2017-2018 Course Offerings - Business/Technology Department

## Programming & Applied Technologies 1

Prerequisite: Integrated Technology

This course provides fundamental concepts in computer programming. You will design and implement solutions to opportunities by analyzing problems, designing potential solutions and then writing, running, and debugging computer programs. Learn Python, HTML5, and CSS3! Opportunities for advancement in college and career using technology applications are investigated.

### **Why Learn Programming?**

If computers are a part of your life, then learning to program will improve your life and future opportunities!

## Programming & Applied Technologies 2

Prerequisite: PAT 1

Once you've found out some of the wonderful things you can create with coding from Programming I, dig into advanced concepts and increase your coding skills in Python. Additional programming languages are also added. Tackle bigger problems, develop bigger solutions, write better code! Implement visual and interactive elements that engage users as you and your ducks learn front-end development.

## Programming & Applied Technologies 3

Prerequisite: PAT 1 & 2

Programming in the Apple iOS environment is the focus of Programming 3. Students enhance their proficiencies using Xcode, Swift, and supportive technologies such as Sourcetree and Github. Actual applications ("apps") are developed and coded to run on Apple devices – iPad, iPhone, Macs and Apple TV. Students create a capstone project to finish the class.

## AP Computer Science Principles

Prerequisite: Integrated Technology/Jr/Sr

### **Why Learn Programming?**

Programming is fun! Use your creativity, curiosity, imagination, passion and teamwork skills. It's problem solving at its best!

This course is designed to appeal to the student who will be not necessarily be pursuing a career in the technology field, but who understands that knowing the fundamental concepts of computational thinking is essential for everyone! This class develops that understanding by working through applying "technical thinking".

## Robotics I & II

Prerequisite: Integrated Technology (I); Robotics I (II)

No doubt about it, robots and those who control them will be part of your future world! This course offers the basics of planning, designing, building and programming a variety of robotic hardware and software systems. We'll explore the history of robots in literature and film; ethical, legal, and sociological implications of robots.

Robotics I studies concentrate on becoming familiar with components and the programming environment of the EV3 robot; Robotics II students build increasingly complex robots, programs, and learn new ways to control and interact with their bots.

## Game Theory & Design I & II

Prerequisite: Integrated Technology (I); GT & D I (II)

Code cool games! Course content includes the design, prototyping, and programming of text-based and graphics-based games in Windows and Android environments. Skills developed include strategic thinking, cooperative and competitive methods, storytelling, character development and mastery of multiple coding environments used in game development.

### **Why Learn Programming?**

Programming changes the world! Badin coders impact the world in a positive way. Make a difference now and in the future using tech to achieve your goals

## Principles of Business

Prerequisite: None

Odds are high that you'll find yourself working for a business, yet how much do you know about how businesses work? P.O.B. combines a well-developed curriculum covering *all* aspects of a prosperous business, with an instructor having over 40 years of experience developing, maintaining and managing successful businesses. Discover how the many working operational parts – Finance, Sales, Customer Service, Production, Research & Development, Purchasing, Legal, Safety & Health, Environmental, Quality and more meld together to attain World Class results!

Please see the Course Curriculum Guide – Business and Technology section for more information  
<https://www.badinhs.org/pdfs/1819cat.pdf>