AP Computer Science A **AP Computer Science Principles** Accounting 1, 2 **Business Law** Career Internship Program Computer Applications (MOS) Consumer Economics INCubatoredu Introduction to Business Keyboarding Marketing MobileMakersEdu 1 MobileMakersEdu 2 PC Repair & Maintenance (A+) Programming in Python Web Page Development

# Business Education



EMAIL: dbuys@lths.net

#### **Brianna Basic, Assistant Division Chair**

TEL: NC (708) 579-6587 EMAIL: bbasic@lths.net

# **Business Education Department Mission Statement**

Career and Technical Education allows students to explore their interests and abilities through a wide range of courses and experiences. CTE equips students with the ability to apply academic skills to the exploration of career pathways. Through hands-on activities, project-based learning, and partnering with industry and educational institutions, CTE prepares students for careers and provides opportunities for post-secondary credits and industry certifications.

#### **Programs** South Campus 9-10 North Campus 11-12 Accounting 1 & 2 Accounting Introduction to Business INCubatoredu • Accounting 1 • Business Law • Computer Applications (MOS) Business Introduction to Business Introduction to Business Administration INCubatoredu • AP Computer Science A • AP Computer Science Principles • Computer Applications (MOS) • Computer Applications (MOS) Keyboarding Keyboarding MobileMakersEdu 1 • MobileMakersEdu 1 **Computer Science** • PC Repair & Maintenance (A+) • MobileMakersEdu 2 • PC Repair & Maintenance (A+) • Progamming in Python • Programming in Python • Web Page Development • Web Page Development • Computer Applications (MOS) • Computer Applications (MOS) • Introduction to Business • Introduction to Business Marketing Keyboarding Keyboarding Marketing • Web Page Development • Web Page Development • AP Computer Science A • Computer Applications (MOS) • Computer Applications (MOS) Keyboarding • MobileMakersEdu 1 Keyboarding • MobileMakersEdu 1 • PC Repair & Maintenance (A+) Technology • MobileMakersEdu 2 • Programming in Python • PC Repair & Maintenance (A+) • Web Page Development • Programming in Python • Web Page Development





# **Business Education Department Standards**

The Business Education Department has established standards for student learning that both guide its courses and programs and challenge students academically. There are six general standards as titled and stated below. In addition, each general standard has specific student learning standards that are available upon request. Finally, specific standards for each course and program have been developed, and these are distributed to students at the beginning of each semester or annual course.

Business Education programs will include experiences that provide for...

# Standard I Career Awareness

study and understanding of business-related careers and for the evaluation of activities in the workplace.

# Standard II Communication Skills

effective use of communication skills.

# Standard III Technological Knowledge and Skills

study and understanding of business-related technological hardware and software.

### Standard IV Work Ethics

study and understanding of practical ethical behavior.

# Standard V Business Principles

study and general understanding of the business world and basic skills for business management.

# Standard VI Economic Literacy

study and understanding of how people have organized for and worked within the production, distribution, and consumption of goods and services.



- **Personal Use** Students should select from appropriate courses to preview subject areas in which an interest exists as this may help in narrowing down possible college majors.
- All courses listed under Business Education apply toward the Practical Arts graduation requirement except Consumer Economics (see p. 7).
- Independent Study Under specific conditions as outlined on p. 25 of the Guide, students may apply for Independent Study. In all cases, students must secure parent, teacher, counselor, divisional, and building administration approval. Independent Study may not be taken as an 8th semester/annual course.

# Accounting 1

Credit: 1/2 (cr/nc)	Level: IV	r
Grade Offered: 10	Fall	BU5516
	Spring	BU5517
11, 12	Fall	BU5511
	Spring	BU5512

Prerequisite: None

This course is recommended for students who want to pursue a fundamental understanding of accounting for college and for a career. The practices of a business accounting program are presented. The theory of double-entry accounting and the accounting cycle are emphasized. Accounting is a basic requirement for college business majors. Problem applications will be presented to enhance understanding.

# Accounting 2

Credit: 1/2	Level: IV	
Grade Offered: 11, 12	Spring	BU5522
Prerequisite: Accounting 1		

This course continues with the fundamentals of accounting theory. It includes the study of payroll accounting, inventory methods, and methods of depreciation, which provide students with the practical experience of keeping financial records for a simulated business enterprise during a normal month's operations. Whenever possible, this course should immediately follow Accounting 1.

# **AP Computer Science Principles**

Credit: 1	Level: V	
Grade Offered: 9, 10	Annual	BU9746
		BU9747

Prerequisite: Algebra I

This course introduces the students to the foundational concepts of computer science and explores the impact computing and technology have on our society. With a unique focus on creative problem solving and real-world applications, AP Computer Science Principles course gives students the opportunity to explore several important topics of computing using their own ideas and creativity, use the power of computing to create

artifacts of personal value and develop an interest in computer science that will foster further endeavors in the field

# **AP Computer Science A**

Credit: 1	Level: V	
Grade Offered: 11, 12	Annual	BU9751
		BU9752

Prerequisite: Algebra II (Prep) or concurrent enrollment

AP Computer Science A introduces students to computer science through programming. Fundamental topics in this course include the design of solutions to problems, the use of data structures to organize large sets of data, the development and implementation of algorithms to process data and discover new information, the analysis of potential solutions, and the ethical and social implications of computing systems. The course emphasizes object-oriented programming and design using the Java programming language. AP Computer Science A is equivalent to a first-semester, college-level course in computer science.

### **Business Law**

Credit: 1/2 (cr/nc)		
	Level: III	[
Grade Offered: 11, 12	Fall	BU5811
	Spring	BU5812

Prerequisite: None

This course enables the student to develop the ability to identify and evaluate the fundamental principles of law used in the business world and day-to-day business activities. It will aid students in understanding their legal rights, obligations, and responsibilities both personally and in the business world. The material covered includes a study of the essential elements of contracts, criminal and civil, fraud, capacity, court systems, real estate and estate planning. Students will study realistic cases and participate in a mock trial.



# **Computer Applications (MOS)**

Credit: 1/2 (cr/	'nc)	Level: III	
Grade Offered:	9, 10	Fall	BU4226
		Spring	BU4227
	11, 12	Fall	BU4221
		Spring	BU4222
D	TZ . 1 11 1 . 11 .		

Prerequisite: Keyboarding skills

In order to remain current in today's ever-changing workplace, up-to-date computer skills are a necessity. Computer Applications will train students in the areas of Word, Excel, Access and PowerPoint. Using the Microsoft Office 2019 suite, students will become proficient with intermediate and advanced features of these programs. Students will gain hands-on experience completing projects using the various programs. This course will also assist students in other courses at Lyons Township High School, including development of proper formatting for research papers using the Modern Language Association (MLA) guidelines, which is a requirement of all research papers at LT. The goal of this course is to help students compete in today's world of technology and achieve success in whatever field they choose to pursue. Students may receive three college credits with College of DuPage upon successful completion of this dual credit course.

# **Consumer Economics**

Credit: 1/2	Level: III	
Grade Offered: 11, 12	Fall	BU0551
	Spring	BU0552
Prerequisite: None		

This course focuses on personal money management concerns that face all consumers. Topics to be studied include economics, insurance, investments, taxes, finance, comparison shopping, consumer protection, credit, and career planning.

### **INCubatoredu**

Credit: 1	Level: IV	7
Grade Offered: 11, 12	Fall	BU5911
	Spring	BU5912
Prerequisite: None		

This course is designed to get students excited about becoming true entrepreneurs by giving them the opportunity to create and fully develop their own product or service. Student teams will explore, research, pivot, iterate, and develop resilience as they work to solve problems they care about. Real-world entrepreneurs and business experts will serve as coaches and mentors, guiding student teams through the process of ideation, market research, and business plan development. Over the course of the year, student teams will learn about

marketing, accounting, and human resources, as well as the legal aspects of running business to get them geared up for Pitch Week. Pitch Week helps to further fire the entrepreneurial spirit by putting student teams in front of actual investors so they can pitch their innovative idea to win funding and turn their wishful thinking into a reality. Students may receive three college credits with College of DuPage upon successful completion of this dual credit course.

# **Introduction to Business**

Credit: 1/2 (cr/nc)	Level: III	
Grade Offered: 9, 10	Fall	BU5116
	Spring	BU5117
11, 12	Fall	BU5111
	Spring	BU5112
Prerequisite: None		

Would you like to learn how businesses are operated and managed in our global society? Getting involved in the business world is the objective of this learning experience. Students will gain a foundation in business ownership, human resources, marketing, ethics, accounting, finance, governmental regulation and law. Students will have the unique opportunity to create a business plan, prototype, and participate in a real-world shark tank presentation. As you explore these areas, take your first step toward becoming a business leader of tomorrow. This course should be considered a survey to the other courses in the Business Education Department.

# Keyboarding

Credit: 1/2 (cr/nc)	Level: II	[
Grade Offered: 9, 10	Fall	BU5416
	Spring	BU5417
11, 12	Fall	BU5411
Prerequisite: None	Spring	BU5412

This course is needed by all students who wish to learn the required keyboarding skills used in today's technical world. Students selecting this course will learn basic keyboarding skills and proper use of the keyboard. Students will improve their speed and accuracy as they key, as well as improve their proofreading skills. In addition, proper formatting of reports, letters, and emails will be learned along with a variety of other keyboarding applications. Keyboarding skills are required for further course work in Computer Applications (MOS), Programming in Python and MobileMakersEdu 1 & 2. Students may receive three college credits with College of DuPage upon successful completion of this dual credit course.



# **Business Education**

# Marketing

Credit: 1/2 (cr/nc)	Level: III	[
Grade Offered: 11, 12	Fall	BU4711
	Spring	BU4712

Prerequisite: None

Have you noticed marketing is all around us? Did you know that each marketing campaign is designed around a target market? You will have the opportunity to brand your own product. Every specific piece of the plan is selected and geared towards that target market. Learn how tools and strategies come together to convince the buyer to say, "YES, I want it!"

# MobileMakersEdu 1

Credit: 1/2 (cr	/nc)	Level: III	
Grade Offered:	9, 10	Fall	BU4956
		Spring	BU4957
	11, 12	Fall	BU4951
		Spring	BU4952
Prerequisite:	Algebra I and posse	ss keyboar	rding

Algebra I and possess keyboarding

skills

MobileMakersEdu 1 provides students an opportunity to create Apple iPhone applications by building and deploying iOS applications with the programming language Swift. Students use problem-solving skills to produce iOS apps that solve every day problems. These apps will grow in complexity throughout the semester. By the end of the course, students will have several working applications that they can load onto an iPhone or iPad. No prior programming knowledge is required, but solid keyboarding skills and strong mathematical reasoning are recommended. This course is a prerequisite for MobileMakersEdu 2.

# MobileMakersEdu 2

Credit: 1/2 Leve		IV	
Grade Offered: 11, 12	Fall	BU4961	
	Spring	BU4962	

Prerequisite: MobileMakersEdu 1

MobileMakersEdu 2 builds on skills learned in MobileMakersEdu 1. Students will construct and deploy advanced iOS applications using complex programming skills and iOS frameworks. Functionality such as GPS and mapping features, physics engines, and external databases are included. Details of object-oriented programming and data structures will be covered. Students leave with a portfolio of iOS apps and an appreciation for the skill sets needed in Computer Science. Mobile-MakersEdu 1 is a prerequisite for this course.

# PC Repair & Maintenance (A+)

Credit: 1	(cr/nc)	Level: III	
Grade Offered:	9, 10	Annual	BU4836
			BU4837
	11, 12	Annual	BU4831
			BU4832

Prerequisite: None

As technology continues to evolve, there are more A+ computer service technician jobs than there are people to fill them. The A+ PC Repair course allows you to take industry recognized certification exams at a discount to LT students. Students who complete the course will become knowledgeable in troubleshooting, configuring, upgrading, preventive maintenance, safety, deploying, repairing, and using PC devices, laptops, smartphones, tablets, printers, and wired/wireless networks. Students are offered the opportunity to receive 6 hours of dual credit through College of DuPage, at no additional cost. This is a hands-on class that includes working in a computer lab with devices and networks to learn and utilize computer repair skills. Students may receive six (6) college credits with College of DuPage upon successful completion of this dual credit course.



# **Business Education**

# **Programming in Python**

Credit: 1/2 (cr/nc)		Level: III	
Grade Offered:	9, 10	Fall	BU4466
		Spring	BU4467
	11, 12	Fall	BU4461
		Spring	BU4462
D	1 1:		

Prerequisite: Keyboarding skills

Programming in Python is an introduction to computer programming for solving practical problems encountered in daily life. Python is a very useful language that is used in careers in the sciences, finance, engineering, and software. Students will learn programming in a hands-on environment, programming both at home and in a computer lab at school. Students will learn programming concepts like decisions, loops, input and output of data, data structures, and modular programming of functions/methods. Emphasis is placed on writing well-structured programs that are user-friendly. Students do not need any prior programming experience, but solid keyboarding skills and strong mathematical reasoning are recommended.

# Web Page Development

Credit: 1/2 (cr.	/nc)	Level: III	
Grade Offered:	9, 10	Fall	BU4846
		Spring	BU4847
	11, 12	Fall	BU4841
		Spring	BU4842
Prerequisite:	Keyboarding skills		

Are you interested in creating websites and learning about various aspects of the Internet? Web Development concentrates on creating web pages using Hyper Text Markup Language (HTML) and Cascading Style Sheets (CSS). Current topics such as Internet safety and the social media are also discussed. Students will work on a final project in a group to develop a website for a local business or non-profit organization.

# **Career Internship Program**

Credit: 1/2 (dc)		Level: IV	
Grade Offered: 11, 12		Fall	BU5551
		Spring	BU5552
	Summer	BU5558	BU5559

This course is designed for a student who has already secured an internship in partnership with their LT teacher in this department. Detailed information about qualifying for a Career Internship Program class can be found on page 10 of the Guide. It is the sole discretion

of each department team to recommend a student for a career internship. An application does not guarantee admission.

# Have you ever considered a career in business? Then you should consider taking courses such as:

Accounting

**Business Law** 

Computer Applications (MOS)

Economics

**INCubatoredu** 

Introduction to Business

Keyboarding

Marketing

# Have you ever considered a career in technology? Then you should consider taking courses such as:

AP Computer Science A

AP Computer Science Principles

Computer Applications (MOS)

Keyboarding

MobileMakersEdu 1 & 2

PC Repair and Maintenance (A+)

Programming in Python Web Page Development



# **Business Education**

# **Business Education Classes**

When choosing Annual Courses, you will need the first and second semester codes.

# **Freshman Courses**

# **Fall Only**

BU5116 Introduction to Business

BU5416 Keyboarding

BU4226 Computer Applications (MOS)

# **Spring Only**

BU5117 Introduction to Business

BU5417 Keyboarding

BU4227 Computer Applications (MOS)

# **Computer Technology**

# **Annual Course**

BU9746/7 AP Computer Science Principles BU4836/7 PC Repair & Maintenance (A+)

#### **Fall Only**

BU4956 MobileMakersEdu 1 BU4846 Web Page Development BU4466 Programming in Python

# **Spring Only**

BU4957 MobileMakersEdu 1 BU4847 Web Page Development BU4467 Programming in Python

# **Sophomore Courses**

# Fall Only

BU5116 Introduction to Business

BU5516 Accounting I BU5416 Keyboarding

BU4226 Computer Applications (MOS)

#### Spring Only

BU5117 Introduction to Business

BU5517 Accounting I BU5417 Keyboarding

BU4227 Computer Applications (MOS)

# **Computer Technology**

# **Annual**

BU9746/7 AP Computer Science Principles BU4836/7 PC Repair & Maintenance (A+)

#### **Fall Only**

BU4956 MobileMakersEdu 1 BU4846 Web Page Development BU4466 Programming in Python

# **Spring Only**

BU4957 MobileMakersEdu 1 BU4847 Web Page Development BU4467 Programming in Python

# **Junior and Senior Courses**

# **Fall Only**

BU0551 Consumer Economics

BU5511 Accounting 1 BU5811 Business Law

BU5111 Introduction to Business

BU5411 Keyboarding

BU4221 Computer Applications (MOS)

BU4711 Marketing

# **Spring Only**

BU0552 Consumer Economics

BU5512 Accounting 1
BU5522 Accounting 2
BU5812 Business Law

BU5112 Introduction to Business

BU4222 Computer Applications (MOS)

BU4712 Marketing BU5412 Keyboarding

# Fall or Spring

BU5551/2 Career Internship

# **Computer Technology**

#### **Annual**

BU9751/2 AP Computer Science A

BU5911/2 INCubatoredu

BU4831/2 PC Repair & Maintenance (A+)

#### Fall Only

BU4951 MobileMakersEdu 1
BU4961 MobileMakersEdu 2
BU4461 Programming in Python
BU4841 Web Page Development

#### **Spring Only**

BU4952 MobileMakersEdu 1
BU4962 MobileMakersEdu 2
BU4462 Programming in Python
BU4842 Web Page Development

