
CODING & PROGRAMMING I: TECH BASICS APP BUILDERS

AREA: LAW

MASTER IN LEGAL TECH

Nº OF SESSIONS: 12

Professor: **BOGDAN-ALEXANDRU RATIU**

E-mail: bratiu@faculty.ie.edu

B.S. System Software Development, Bucharest Polytechnic University

M.S. information Security, Bucharest Academy of Economic Studies

IBM and Lenovo Embedded Software Engineer / Software Defined Networking Specialist

INTRODUCTION

While there are no theoretical prerequisites, permanent access to a desktop/laptop computer running Windows/Linux/Mac OS is necessary. The course teaches a programming language and all the examples and assignments will need to run on a desktop/laptop.

No prior programming experience is required. The course will start from scratch and students will be able to follow all examples.

I will send an email before the first session with the programs that you will need to install on your laptop.

LEARNING OBJECTIVES

The main objective is to become familiar with programming, using the Python programming language as an example.

- Understand the strengths of having programming knowledge
- Learn to recognize tasks that can be automated
- Be able to read basic python code
- Go over some useful python programs that automate lawyer specific tasks
- Use programming as a tool that makes work more efficient

PROGRAM

SESSIONS 1 - 2

Introduction
Checking the Python Installation and IDE
Integrating the IDE + Version Control
First simple print programs

SESSIONS 3 - 4

Computer Hardware Basics
About Programming
Operators, Variables, Getting Input
Examples
Homework

SESSION 5

Conditional Execution
Iterations
Example

Homework - simple game

SESSION 6

Strings - working with text data
Files - saving and retrieving information from the disk
Examples

Homework

SESSION 7

Functions - adding modularity, abstraction, readability and reusability
Lists - different way of storing information
Examples

Homework

SESSIONS 8 - 9

Dictionaries
Modules and Packages
Class Programming Competition
Homework

SESSIONS 10 - 11

DOCX Module - Generating and Updating Word Documents: Real Life Examples
Using the case.law library to search for cases

SESSION 12

Web scraping: Getting contents from web sites
Social media interaction: Getting Twitter Information
Final Project discussion

EVALUATION CRITERIA

Criteria	Percentage	Comments
Class Participation	20 %	
Homework	30 %	Small exercises to be done between sessions
Individual Work	50 %	Submit an essay that describes a real life situation that can benefit from programming automation

FAILING GRADE AND REASSESSMENT

When students receive a Fail in a course, they have the opportunity to present themselves for reassessment in order to earn the necessary credits toward graduation.

The reassessment of students should be scheduled between 5 and 10 working days after the review session takes place.

Grades for the reassessment are limited to a Low Pass and Fail.

Both, the initial Fail as well as the grade of the reassessment remain on the transcript. For the purpose of calculating the GPA however, only the grade of the reassessment is to be considered. Students receiving a failing grade in the reassessment of a course will not be able to continue in the program.