Course Introduction	
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Penn Engineering	

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## Introduction

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### Who Am I?

- I'm the Lecturer for this Programming Languages & Techniques course
- I'm also the Research & Education Director at Wharton Customer Analytics
- What is Whatron Customer Analytics
  What is Whatron Customer Analytics?

  We partner with companies to provide real-world datasets to Penn students, faculty, and academic researchers for data and analytics projects
  We teach in-person technical workshops and build online courses for undergrads and MBAs to hone their data management and technical skills

### What's My Background?

- I started out as a musician ... then worked in radio broadcasting and audio production
- I started doing Flash programming ... and I developed a live web conferencing platform for Big Pharma
- I received my Masters in Computers & Information Technology from UPenn
- I worked as a programmer at the School of Design
- $\bullet \ \ \text{I started my own company BLeeK, LLC doing programming and freelance web development}$
- I worked as an application developer for Wharton Computing
- I became the Research & Education Director at WCA
- Most recently, I became a Lecturer at Penn Engineering

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### More About Me – I Play Bass



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### More About Me – I Like My Dog, We're Close



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OK, Enough About Me!	<del></del>	
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About This Course		
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Who Is This Course For?		
<ul> <li>Master's students who are not in the Department of Computer and Information Science</li> <li>People who want to learn the basics of programming and have never programmed before</li> <li>People who have programmed before but have not used that skill in a long time (let's say</li> </ul>	There is a second of the secon	 
more than 5 years)		

### Do Not Take This Course If... You have written a substantial project/program in any programming language Programming languages come and go, you do not need to take this course just to learn a new language You have a lot of other coursework There will be programming assignments every week – most of them are very time consuming Debugging code takes an unpredictable amount of time!

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## What Will You Learn in this Course? Intro to programming using Python Code syntax Style and conventions You will also learn: Code desting Code debugging Code design Code documentation Computational thinking!

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# Course Topics for Python Intro to Programming/Python, & Jupyter Notebook Variables, Conditionals, & IDLE Intro to Lists, Loops Functions & Modular Programming Lists & Strings PyCharm, Tuples & Sets Unit Testing Dictionaries Files Data Analysis Object-Oriented Programming Course topics are subject to changel

Python	
Why begin with Python? Great first language and easy to get up and running quickly Easier to learn than Java Allows you to spend more time thinking about programming logic and alg time thinking about code syntax	orithms, and less
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- Python in Easy Steps (by Mike McGrath)
These books are entirely optional     I will not cover exactly the same material nor will I assign readings from them