

**ITEC / SENG 424: Python Programming (Theory)**  
**ITEC / SENG 425: Python Programming (Lab)**

Semester 2 of 2021

BS (Information Technology) Part 2

BS (Software Engineering) Part 2

**Recommended book:** *Python for Everybody* by Dr. Charles Severance

**Available online:** [PDF version](#), [HTML version](#)

**Lecture outline:**

Week 1: Introduction to the course, Python overview

Week 2: Python installation and development setup

Week 3: Variables, expressions and statements

Week 4: Conditionals, selection structures

Week 5: Working with strings

Week 6: Iterations, repetition structures

Week 7: Python collection data structures: Lists

Week 8: Python collection data structures: Dictionaries

Week 9: Python collection data structures: Tuples

Week 10: Functions

Week 11: Reading, Writing and Working with Files

Week 12: Classes and objects

Week 13: Network Programming

Week 14: Web Programming

Week 15: Database programming

Week 16: Review

(Optional) Other resources are available here: <https://www.py4e.com/>