**Python programming basic to advanced**

Duration: 2 Months; Per Week: 3 Classes (Sunday, Tuesday, and Thursday)

Per Class Duration: 3 Hours (6.00pm – 9.00pm)

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| **Week** | **Day** | **Course Contents** | **Remark** |
| Week 1 | Day 1 | * + Python Overview   + PC Configuration   + Python Features   + Basis Syntax |  |
| Day 2 | * + Variable Types   + Type Cast   + Input from user   + Operators in Python |  |
| Day 3 | * + String   + String Formatting   + All String class Functions   + Escape Sequences |  |
| Week 2 | Day 1 | * + List []   + List Comprehensions,   + Tuples ()   + Nested list Comprehensions   + Tuples Comprehensions;   + Nested Tuples Comprehensions |  |
| Day 2 | * + Set Comprehensions   + Nested set Comprehensions   + Sorting List, Tuples & Objects |  |
| Day 3 | * + Dictionary {‘\_’ : ’\_’}   + Dictionary Comprehensions   + Data type Conversion |  |
| Week 3 | Day 1 | * + Decision Making   + If…elif….else   + Number |  |
| Day 2 | * + For loop |  |
| Day 3 | * + While loop |  |
| Week 4 | Day 1 | * + Function   + Create our own function   + Global and local variable   + Overloading |  |
| Day 2 | * + Class & Object in python   + Overriding |  |
| Day 3 | * + Inheritance |  |
| Week 5 | Day 1 | * + Constructor Method/ Function |  |
| Day 2 | * + Special function in python   + Numeric Functions |  |
| Day 3 | * + File I/O   + Read data   + Write data   + Append data   + Binary Read   + Binary write |  |
| Week 6 | Day 1 | * + Exception Handling |  |
| Day 2 | * + Os module |  |
| Day 3 | * Sys module |  |
| Week 7 | Day 1 | * Datetime module * Calendar module |  |
| Day 2 | * + Regular Expressions part 1 |  |
| Day 3 | * + Regular Expressions part 2 |  |
| Week 8 | Day 1 | * + Pip   + Python virtualenv |  |
| Day 2 | * + Installing Django |  |
| Day 3 | * + Run first web app in python (Django) |  |
| Week 9 | Day 1 | * + Django part 1 |  |
| Day 2 | * + Django part 2 |  |
| Day 3 | * + Django part 3 |  |
|  |  | Final Test |  |