



ICS 214 IT Workshop III (Python)

IIIT Kottayam

Session 1 - Course Overview

Instructor: Anmol Krishan Sachdeva

Monday | December 5, 2022



Anmol Krishan Sachdeva
Hybrid Cloud Architect, Google
MSc Advanced Computing
University of Bristol, United Kingdom
LinkedIn: [greatdevaks](#)
Twitter: [@greatdevaks](#)

- International Tech Speaker
- Distinguished Guest Lecturer
- Represented India at reputed International Hackathons
- Deep Learning Researcher
- 8+ International Publications
- Google, Microsoft, IBM, and HP Certified Professional
- ALL STACK DEVELOPER
- Mentor

Schedule

Day	Date	Lecture / Demo / Interactive Q&A Session
Day 1	05.12.2022 (Mon)	5.00 PM to 5.30 PM
Day 2	06.12.2022 (Tue)	4.00 PM to 5.30 PM
Day 3	07.12.2022 (Wed)	4.00 PM to 5.30 PM
Day 4	08.12.2022 (Thu)	4.00 PM to 5.30 PM
Day 5	09.12.2022 (Fri)	2.00 PM to 3.30 PM

Day	Date	Lecture / Demo / Interactive Q&A Session
Day 6	12.12.2022 (Mon)	5.00 PM to 6.30 PM
Day 7	13.12.2022 (Tue)	4.00 PM to 5.30 PM
Day 8	14.12.2022 (Wed)	4.00 PM to 5.30 PM
Day 9	15.12.2022 (Thu)	4.00 PM to 5.30 PM
Day 10	16.12.2022 (Fri)	4.00 PM to 5.30 PM



The Edge: Why this course in this way?

- Get practical Industry Exposure in each session
- Explore beyond the conventional syllabus
- Build solid foundations for Open Source and start making contributions
- Get an understanding of capabilities of Python Programming
- Explore opportunities in the Python Developer Community



Course Content - Week 1: The Foundations

Lecture	Date	Description
Lecture 1	05.12.2022 (Mon)	Course Overview
Lecture 2	06.12.2022 (Tue)	The Development Toolkit: Project Dependencies, Virtual Environments, and Git
Lecture 3	07.12.2022 (Wed)	Writing Effective Functions: Parameters, Arguments, Recursion, and Decorators
Lecture 4	08.12.2022 (Thu)	Functional Programming: Lambdas, Iterators, Generators, and Yield Statements
Lecture 5	09.12.2022 (Fri)	Pythonic OOP: Classes, Inheritance, Properties, and Dunder Methods



Course Content - Week 2: Industry Relevance

Lecture	Date	Description
Lecture 6	12.12.2022 (Mon)	Towards Automation: Python and Network Programming
Lecture 7	13.12.2022 (Tue)	Database Processing: Python and Databases
Lecture 8	14.12.2022 (Wed)	Let's talk Data: Scientific Programming, Numpy, SciPy, and Visualizations
Lecture 9	15.12.2022 (Thu)	Into the Web: Web Development and RESTful APIs
Lecture 10	16.12.2022 (Fri)	Final Assessment (1 hour) + Ask Me Anything (30 minutes)