Python Training — Essential Foundations for Data Science

Module 1 — Introduction to Python

- Overview of Python and its key applications in analytics and scientific computing
- Installing Python and choosing a development environment (IDLE, VS Code, or Jupyter)
- Getting started with the Python console and running your first scripts

Module 2 — Core Programming Concepts

- Understanding variables, data types, and type conversion
- Working with strings, numbers, and booleans
- Essential arithmetic and logical operations

Module 3 — Control Flow Essentials

- Writing conditional statements (if, elif, else)
- Using loops effectively (for, while)
- Mastering indentation and clean coding practices

Module 4 — Functions and Script Structure

- Defining and calling functions
- Passing arguments and returning values
- Organizing your code into clear, reusable blocks

Module 5 — Introduction to Object-Oriented Programming (Optional)

- Understanding objects and their role in Python
- Creating simple classes and instances

Module 6 — Working with Files

- Reading and writing text files
- Processing data line by line for real-world tasks

Module 7 — Practical Workshop

- Building a small end-to-end program combining variables, loops, and functions
- Personalized feedback and improvement tips

Articulate Storyline 360 Training: Create Interactive eLearning Modules

Module 1 — Introduction to Articulate 360 and eLearning Standards

- Overview of the Articulate 360 suite: Storyline, Rise, Review, Content Library
- Key eLearning concepts: modules, learning paths, interactive activities
- Industry standards: SCORM, xAPI, AICC
- High-level view of an instructional design cycle using Articulate tools

Module 2 — Creating a Course with Storyline

- Getting to know the interface and core functionalities
- Inserting slides, text, images, and videos
- Building interactions: buttons, clickable zones, layers, states
- Adding quizzes and assessments
- Managing navigation and customizing the course player

Module 3 — Editing and Improving an Existing Course

- Importing and opening an existing project
- Identifying inconsistencies (navigation, design, content)
- Editing text, media, and interactions
- Best practices for review and instructional validation
- Quality checks: accessibility and mobile compatibility

Module 4 — Exporting and Creating SCORM Packages

- Configuring tracking and scoring (SCORM 1.2, SCORM 2004, xAPI)
- Selecting the right export settings for your LMS
- Generating and testing a SCORM package
- Verifying content with SCORM Cloud before deployment

Module 5 — Using Articulate Review for Collaboration

- Publishing a project to Review 360
- Inviting collaborators and collecting feedback
- Version control and tracking revisions
- Integrating the review process into a team workflow

Module 6 – LMS Integration

- Importing a SCORM package into an LMS (e.g., Moodle, TalentLMS, Docebo)
- Key LMS settings: results tracking, completion, progress
- Testing compatibility and troubleshooting common issues
- Best practices for go-live deployment and user support

Module 7 – Practical Workshop and Final Project

- Building a mini interactive module with a quiz
- Exporting to SCORM and uploading to a test LMS
- Validating the project using Articulate Review with feedback loop simulation
- Final skills assessment and participant feedback

Training for architects

At Doussou Formation, we offer training on the most advanced tools for engineers and professionals in 3D modeling and design. Our courses, delivered by experts, cover a wide range of industry-recognized software to meet your specific needs in design, animation, and rendering. Discover below the training programs we offer:

3ds Max combined with V-Ray is an industry standard for high-end architectural visualizations thanks to its ability to produce high-quality photorealistic renderings.

- 3ds Max and V-Ray
- [Details]

Accelerate your architectural projects with Lumion, a real-time rendering software. Learn to create ultra-realistic 3D visualizations for your

architectural designs.

- Lumion
- [Details]

Unreal is a powerful real-time rendering engine used in architecture, gaming, and film. Our training will help you integrate Unreal into your 3D visualization projects.


- Unreal
- [Details]

This training will teach you how to master Twinmotion to create real-time architectural renderings, including animations and immersive visualizations for project presentations.

- Twinmotion
- [Details]

Blender is an open-source software capable of everything from 3D modeling to animation and complex simulations. Learn to create complete projects with guidance from our expert instructors.
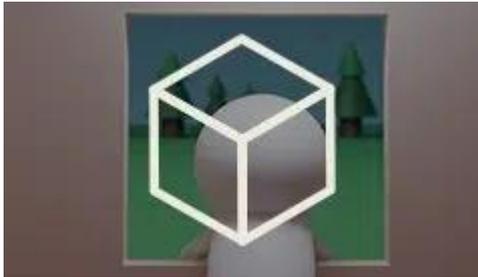
- Blender
- [Details]

Vantage allows you to create ultra-fast photorealistic renderings. This training is ideal for those wishing to integrate high-end visualizations into their workflow.

- Vantage
- [Details]

ZBrush is the industry standard for digital sculpting. Learn to create detailed characters and 3D models used in films, video games, and animations.

- ZBrush
- [Details]

Autodesk Maya is a key tool for animation and visual effects. This training will teach you how to create animations and 3D models for your projects.

- Maya
- [Details]

Why Choose Doussou Formation?

- **Certified instructors** who are experts in their field.
- **Personalized approach** with hands-on workshops tailored to your needs.
- **Professional certificates** available at the end of each training.
- **Flexible learning options**: online or in person depending on your preference.

Join our training programs and develop advanced skills on the software tools that will make a difference in your engineering, design, and visualization projects.

Feel free to contact us for more information or to register for our training sessions.

By email: info@doussou-formation.com

Adobe Acrobat Pro Training: Forms & Digital Signatures

- Select and configure a digital signature manager
- Set password options to secure your signatures
- Add a custom image as a visual signature

- Activate text recognition in scanned documents
- Use advanced search and text extraction options

- Understand the specific features of interactive PDF forms
- Add and format text fields
- Set field validation and use the alignment grid
- Insert checkboxes, dropdown lists, and radio buttons
- Create automatic calculation fields
- Add reset, email submit, and print buttons
- Configure compatibility settings for Acrobat Reader
- Centralize and compile responses from form submissions

- Define a logical and smooth tabbing order

- Use text and graphic comment tools efficiently
- Manage and track annotations in a review workflow
- Send documents for review and enable commenting rights in Adobe Reader
- Import and export comments for optimal collaboration

- Set display preferences for when a PDF file is opened

Python Training: Finance and Time Series

Introduction to Python Training: Finance and Time Series

Module 1: Introduction to Python for Finance

- Overview of Python as a programming tool for finance.
- Install and configure the Python environment with financial libraries.
- Manipulate financial data, data types, and basic operations.

Module 2: Financial Data Analysis with Pandas

- Introduction to the Pandas library for data analysis.
- Load financial data from various sources (CSV files, databases, etc.).
- Clean and preprocess data for in-depth analysis.
- Perform grouping, filtering, and statistical calculations on time series.

Module 3: Financial Data Visualization with Matplotlib and Seaborn

- Introduction to Matplotlib and Seaborn for data visualization.
- Create charts such as price curves, return histograms, and candlestick plots.
- Customize visualizations for effective presentation of financial data.

Module 4: Financial Time Series Analysis

- Understand key concepts in financial time series (volatility, trends, seasonality, etc.).
- Apply time series models such as Moving Average, Autoregression (AR), ARMA, and ARIMA.
- Evaluate and interpret model performance.

Module 5: Predicting Financial Prices with Machine Learning

- Introduction to basic machine learning and regression concepts.
- Use Machine Learning libraries such as Scikit-Learn to predict financial prices.
- Compare regression model performance to achieve accurate predictions.

Module 6: Practical Finance Applications with Python

- Apply acquired skills to solve real-world financial problems.
- Create investment strategies using financial time series analysis.
- Implement risk and portfolio analysis to support informed decision-making.

Python and Data Science Training – Complete Tour

Introduction to the **Python** and Data Science Course — Block 1

- Variable types (integer, float, boolean, etc.) and basic operators;
- Data structures (list, tuple, dictionary, etc.);
- Flow control (if-else, try-except-finally);
- Loops (for, while);
- Combining flow control and loops;
- Functions and methods (function(object) and object.method());
- Importing external modules to access additional functions and methods;
- Syntax principles and best practices.

Introduction to **Python** — Block 2

- Managing modules;
- Administering the operating system;
- Extracting data from the web (web scraping);
- Cleaning and transforming data using the regex module;
- Working with time using the datetime module.

Introduction to Data Science

- Jupyter Notebook, Spyder, and other tools;
- Introduction to NumPy;
- Introduction to Pandas — Series objects;
- Introduction to Pandas — DataFrame objects;
  - Extra: Introduction to Pandas — Instructions;
  - Extra: Tidy Data;
- Groupby operations and aggregations;
- Data collection from Web APIs and analysis;
- Data visualization;
  - Extra: Geospatial visualization.

Master Git: Manage Your Versions and Collaborate Effectively

Module 1: Introduction to Git

Objective: Understand the usefulness of Git in version control and project development.

- Introduction to version control in the context of a static website project.
- Install and configure Git as well as Python, Pip, GitHub, GitLab, and

MkDocs.
- Overview of Git and its ecosystem (GitHub, GitLab, Bitbucket, etc.).

Module 2: Working Alone with Git

Objective: Master the fundamentals of Git for an individual static website project using Python and Markdown.

- Basic commands: git init, git config.
- Track and record changes: git add, git status, git commit.
- Explore previous versions: git log, git diff.
- Manage versions: git tag.
- Publish online: git push.
- Discover MkDocs, some Python, and Markdown to run the site locally and host it online.
- Discover other concepts: branches (git branch, git checkout), a YAML file, a README.md, on GitHub and GitLab.
- Clone an online project: git clone.
- Work with command aliases.

Module 3: Working in a Team with Git

Objective: Learn how to use Git in a collaborative environment.

- Discover team types: owner and collaborator for a 2-person project, or equal collaborators.
- Manage teams and define permissions.
- Review commands and add updates to synchronize the local repository with the central repository: git fetch, git pull.
- Best practices for teamwork with Git.

Module 4: Pull Request (Merge Request)

Objective: Master the process of requesting code integration through a Pull Request.

- Introduction to Pull Requests, contributing to a project, and the code review / merge request process.
- Create and submit a Pull Request.
- Handle a conflict-free request: approve or reject the request.
- Update your repository: git fetch, git pull.
- Strategies for managing Pull Requests within a team.

Module 5: Managing Merge Conflicts

Objective: Learn how to handle and resolve version conflicts.

- Understand merge conflicts: causes and how to detect them.
- Handle a request with conflicts: proceed or reject the request.
- Resolve conflicts manually: git status, git mergetool.
- Use conflict resolution tools (VS Code, Meld, etc.).
- Best practices to avoid conflicts: use the stash git stash.
- Manage the stash: add, apply, drop, and more.

Module 6: Synchronization and Continuous Integration

Objective: Manage team integration workflows.

- Differentiate between origin and upstream repositories.
- Introduction to CI/CD concepts, continuous integration, and triangular workflows.
- Introduction to branches: git branch, git checkout -b.
- Introduction to HTTP and SSH remotes and managing SSH encryption keys.
- Discover backtracking, history, and other user-friendly tools.
- Explore the CI/CD pipeline, continuous integration, and continuous deployment.

Unreal Engine Training for Architecture and Design

Introduction to Unreal Engine Training

- Using templates
- User interface
- Project management
- Object manipulation

Creating an Unreal Engine Project

- Importing content from various sources
- Datasmith
- Object management
- Terrain and vegetation
- Modeling
- Lighting
- Creating different types of lights
- Creating outdoor lighting: day/night

Unreal Engine Materials and Textures

- Material Editor
- Material Instances
- Creating various PBR materials (metal, wood, concrete, glass, plastic, water, etc.)
- Material Functions

Unreal Engine Animation

- Level Sequence
- Keyframe animation
- Physics and dynamics

Unreal Engine Rendering and Animation Production

- High-resolution image rendering
- Animated video rendering

Unreal Engine Interactivity

- Introduction to Blueprints
- Compiling an interactive project

VRay: Lighting, Materials, and Photorealistic Rendering

Day 1: Introduction to VRay Training and VRay Fundamentals

- Introduction to VRay
- Installing VRay
- Navigating the VRay interface
- Basic lighting
- Cameras
- Basic materials
- Hands-on workshop

Day 2: Advanced Techniques and Practical Project in VRay

- Global Illumination (GI) and Advanced Reflection/Refraction
- Atmospheric effects
- Advanced materials
- Camera animation

- Practical project
- Review and questions
- Conclusion of the VRay training

Blender Training – Architecture and Design

Introduction to Blender Training

- Blender interface and navigation
- Project import (Revit, SketchUp, 3ds Max)

Modeling in Blender

- Polygon modeling
- Curves
- Physics-based modeling
- Parametric modeling
- Environment creation

Materials and Textures in Blender

- Material application
- Specific materials

Lighting in Blender

- Natural sunlight
- Artificial lights
- Lighting study by time zone and specific periods

Rendering in Blender

- Camera settings and manipulation
- Ray-traced rendering (Cycles)
- Real-time rendering (Eevee)
- Blender animation sequence production
- Blender post-production

You may also be interested in

- Unity 3D Training