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

Statistics and Data Analysis Training with SPSS

MODULE 1: Creating and Organizing Data with SPSS

- Coding and entering data from a questionnaire into SPSS
- Adjusting variable properties in SPSS

- Handling missing values using SPSS
- Computing new variables in SPSS

MODULE 2: Descriptive Analyses with SPSS

- Frequency tables and descriptive statistics in SPSS
- Cross-tabulation tables in SPSS
- Creating charts and graphs with SPSS

MODULE 3: Bivariate Tests with SPSS

- Correlation tests: Pearson, Spearman, partial, and canonical correlations in SPSS
- Chi-square (χ^2) test with SPSS

MODULE 4: Parametric and Non-Parametric Tests with SPSS

- T-test with SPSS
- Analysis of Variance (One-way ANOVA) with SPSS
- Z-test with SPSS
- Kolmogorov-Smirnov (K-S) test with SPSS
- Wilcoxon test with SPSS
- McNemar test with SPSS
- Mann-Whitney U test with SPSS

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

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](#)

D5 Training: Architectural Visualization Course

Introduction to **D5** Training

- D5 interface and navigation
- Object manipulation in D5
- Project import (Revit, SketchUp, 3ds Max)
- Terrain

Materials and Textures in D5

- Material application
- Specific materials

Lighting in D5

- Different types of lighting and their application
- Sunlight study

Rendering in D5

- Camera settings and manipulation
- Still image rendering
- Animated sequence production
- D5 post-production effects

Lumion Training: Architectural Visualization Course

Introduction to **Lumion** Training

- Lumion interface and navigation

- Object manipulation in Lumion
- Project import (Revit, SketchUp, 3ds Max)
- Terrain

Materials and Textures in Lumion

- Material application
- Specific materials

Lighting in Lumion

- Different types of lighting and their application
- Sunlight study

Rendering in Lumion

- Camera settings and manipulation
- Still image rendering
- Animated sequence production
- Post-production effects

Conclusion of the Lumion Training

Twinmotion Training: Architectural Visualization Course

Introduction to **Twinmotion** Training

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

Materials and Textures in Twinmotion

- Material application
- Specific materials

Vegetation, Terrain and Landscaping in Twinmotion

- Terrain sculpting
- Terrain from predefined sources
- Scatter tools
- Grass, trees

Object Libraries and External Source Import in Twinmotion

- Library asset management and manipulation
- Importing external content
- User library
- Lights
- Characters and vehicles
- Animator

Rendering in Twinmotion

- Camera settings and manipulation
- Still image rendering
- "Phased" rendering
- Animated sequence production
- Post-production