

# System and Studies Engineer

## Offer

Contract Type: Permanent, Executive Contract, governed by the SYNTEC Collective Agreement

Location: Massy office with occasional travel to client and supplier sites (primarily France and Europe)

Publication Date: 18/11/2024

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## About SpaceDreamS

Founded in 2021 and based in Paris and Toulouse, SpaceDreamS is a spaceport architect. The company's mission is to enhance the competitiveness of launch systems by developing interoperable and modular launch pads. SpaceDreamS provides turnkey ground solutions for launch vehicles and spaceports, aiming to reduce the cost and time to access space.

A multiple laureate of the France 2030 program, SpaceDreamS is supported by the DGA, CNES, and ESA to foster the growth of its clients in France and Europe.

We are developing NuPad (Next-generation Universal Pad), the first interoperable launch platform adaptable to any type of launch vehicle, at various lifecycle stages, and capable of being transported between certified launch sites.

The TwinPad is the digital twin of the ground launch system. It facilitates the development of launcher and launch pad operations software, as well as virtual and real-time simulation of cryogenic, electrical, and mechanical fluid processes.

SpaceDreamS is also conducting preliminary studies on the development of ground support systems for several mini and micro launchers.

## Role

The System and Studies Engineer will work on projects for institutional clients and private companies, including early phase strategy and feasibility studies or technical projects up to successful PDR. The Studies and System Engineer will be involved with multiple projects of varying sizes.

The Studies and System Engineer will work on two types of projects for institutional clients and private companies. The first focuses on early-stage feasibility or strategy studies. Types of work can include site selection, business elements, licencing concerns, organisational structures, operational scenarios, researching state of the art in comparable fields, and developing long-term strategy objectives. The second type of project involves the application of suitable system engineering approaches to support hardware delivery projects up to the PDR level. In this frame, they apply the company's consistent system engineering approach, using mainly an MBSE approach and the Arcadia method, and calling on the support of the technical teams as and when required.

## Main Responsibilities:

<u>Strategy and Studies:</u> Apply your knowledge of the space sector and systems engineering with a creative mind to solve varied problems. Research existing solutions in other domains and determine if and how to apply these in a space context. Consider operational scenarios in 2050 and the development path required to get there.

<u>System Engineering:</u> Create the technical and operational requirements applicable to the systems to be developed, including their declination into subsystems and verification methods. Carry out functional analyses and elaborate the operational logic of the systems. Take the lead in defining the criteria for compliance with the requirements and play an active role in system design from a multidisciplinary perspective (mechanical, fluidic, electrical, etc.).

## Profile

We are looking for a candidate with at least 3 years of demonstrated system engineering experience. Candidates with less experience, who have participated in student rocketry teams (particularly the system or ground segment teams), will also be considered.

You have a creative mind and are comfortable freely brainstorming novel solutions or ideas. You are able to dream big, without self-censoring based on the existing paradigm.

You have a good knowledge of the space domain in Europe, and the NewSpace field abroad. You may follow sector news and events, identifying trends or patterns.

You have experience in complex industrial environments covering multiple domains (mechanical, fluidic, and control & command systems), or a strong technical background.

Your approach is rigorous and organised. You can easily prioritise parallel activities.

You are proficient in the MBSE approach, particularly the Arcadia method. Experience with Enterprise Architect or Capella is a plus.

Fluent English is required.

#### We offer

The opportunity to be part of a unique human and technical adventure within a diverse and experienced team.

Freedom of action and organisation in your projects with appropriate resources.

A salary that matches your skills and the key role you will take on. Additional social benefits.

A simple, efficient, and advantageous health insurance. The possibility to work partially from home.

### Interested?

Send your CV and cover letter to contact@spacedreams.com