

Senior GNC Engineer (f/m/d)

Permanent employee, Full-time · Munich

TYTAN Technologies

TYTAN is a young deep-tech defense startup that develops a cost-effective counter-drone solution to protect people and critical infrastructure. We are an international team of ambitious engineers who combine expertise in autonomous systems and UAV design. We are looking for a **Senior GNC Engineer** to design, implement, and validate guidance, navigation, and control systems for advanced UAV platforms. You will work across **fixed-wing and VTOL aircraft**, and take full ownership of GNC systems from simulation to flight. This role is hands-on, deployment-focused, and close to the aircraft. You will write production code, help building simulation frameworks, and validate system performance through real-world flight testing. You will act as a **technical sparring partner** within the GNC domain, contributing experience, pragmatism, and sound engineering judgment.

Your roadmap to make an impact

- Own the **end-to-end GNC lifecycle** for advanced fixed-wing and VTOL UAV platforms, from early concept to operational flight
- Take guidance, navigation, and control systems **from simulation into real aircraft**, ensuring robust sim-to-real transfer
- Lead and execute **hands-on flight testing**, including tuning, validation, and post-flight analysis
- Drive GNC system quality through **iterative improvement based on flight data and operational feedback**
- Shape autonomous behavior by defining and refining **flight modes, transitions, and failure handling**
- Act as a **technical sparring partner** within the GNC domain, contributing experience-based judgment to key decisions

- Collaborate closely with airframe, avionics, and software teams to ensure system-level coherence
- Establish and maintain clear documentation of assumptions, architectures, and validation results

Who you are

- Several years of hands-on experience developing **GNC systems for fixed-wing and VTOL UAVs** ideally in a project.
- Proven exposure to **real-world UAV deployments and operations**, beyond simulation or academic work. **Hands-on flight testing experience is required**; holding a **private pilot license** is a strong advantage.
- Strong foundation in **flight dynamics, guidance, navigation, and control**
- Proven ability to implement GNC software in **C++ and Python**, with practical experience using **ROS2 and PX4**
- Experience designing and operating **state machines** for autonomous flight and mission logic
- Experience building and maintaining **simulation frameworks**, including multi-airframe
- A pragmatic, experience-driven mindset — strong judgment matters more than perfect theory

Why TYTAN?

- Be the first to welcome the world into a deep-tech defense startup that is shaping the future of security.
- Work in a fast-paced, international team where your contributions truly matter and your impact is immediate.
- Participate in our success with stock options.
- Be part of something bigger in a mission driven company.
- Enjoy flexible working hours.
- Access to EGYM Wellpass sports facilities.

- All day coffee and snacks, team events, and a modern office in Munich.

About us

At TYTAN, it is more than just a job; it is about embracing autonomy, personal growth, and purpose. Make a lasting impact in the new era of defense! Join us to create a safer world for all.

TYTAN is an equal-opportunity employer committed to fairness and inclusivity. We do not prioritize any specific religion, gender, nationality, or background. Due to security clearance requirements, affiliations with countries listed under § 13 para. 1 no. 17 SÜG may affect the application process. All qualified applicants are encouraged to apply.

Please apply here: <https://tytan-technologies-gmbh.jobs.personio.de/job/2496057?language=en&display=en>