Internships / Master’s Theses
Galileo Satellite Navigation – Performance and Tools

What can you expect?
You will contribute to the ongoing deployment and exploitation phase of Galileo, the European satellite navigation system, as well as the definition of the future second generation of Galileo by contributing on system performance and integrity aspects. You will join the Airbus Navigation Department. With more than 70 engineers and 20 years of experience it is one of the leading expert groups in Europe for the development and implementation of the European satellite navigation systems EGNOS and Galileo.

What are your daily activities?
- Work on concepts for future system evolutions, navigation concepts and algorithms
- Implement and test ideas with simulations
- Support Galileo system testing
- Work in exiting fields like:
  - GNSS data processing,
  - Algorithm optimization,
  - Bernese GNSS Software,
  - Satellite orbit force modelling,
  - Satellite orbit determination,
  - GNSS based time synchronization,
  - User error modelling,
  - Precise Point Positioning,
  - Real time kinematic measurements
  - Set-up of field test campaigns
  - Advanced Receiver Integrity Monitoring,
  - Data dissemination algorithms,
  - Software optimization,
  - Trade-off analyses,
  - Sensitivity studies,
  - Cryptography,
  - Authentication aspects,
  - New integrity concepts,
  - Anomaly monitoring,
  - Android programming and App development
  - Test Galileo in smartphones
  - Galileo testing with RF constellation simulator
  - ...and many more
- Some activities can be carried into a final thesis work

What are we looking for?
- Students of Applied Mathematics, Physics, Electrical Engineering, Telecommunication Engineering, Geoinformatics, Geodesy, Computer Science, Software Engineering or similar
- Enthusiasm to understand and develop new features and algorithms
- Interest to get an inside in the development of large systems
- Experience in Python, Java or C
- Knowledge in or interest to learn about software development and build process on Linux, design processes, version control, testing,
- Demonstrated agility and ability to adapt to new topics
- Good English and German language

Conditions
- Site: Airbus Defence & Space Munich Ottobrunn
- Target Group: Students - Engineering
- Work Experience: none
- Functional Area: Engineering / Design & Development
- Education: Final Phase of Studies
- Duration: Minimum 3, maximum 6 months
- Compensation: 700€/month + supplement for accommodation and public transport

Get in contact today!
Check out for currently open vacancies at [www.jobs.airbus-group.com](http://www.jobs.airbus-group.com) or directly contact michael.kirchner@airbus.com.