

## Differential GNSS

réf. **GNSS-DIF**

Code OACI 179

ENAC - SINA/EES/ELE

### FORMATION EN ANGLAIS

#### DURÉE

2 jours

#### PLACES OFFERTES

40

#### DATES ET LIEUX

No session in 2016, recast in progress

#### CONDITIONS DE PARTICIPATION

Frais pédagogiques :  
Catégorie B  
• 2017 : 756 €

Informations pratiques :  
voir en fin de catalogue

#### CONTACT ADMINISTRATIF ENAC

formationcontinue@enac.fr

Bulletin d'inscription obligatoire :  
voir en fin de catalogue

### Objectifs

This course emphasizes the fundamentals of differential GNSS baseline techniques with focus on DGPS and an introduction to DGPS RTK applications. The course will explore the various error mitigation techniques and methods for improving the navigation to submeter and high-precision positioning.

Performance aspects with respect to accuracy, integrity, continuity, and availability will be presented.

The course concludes with an overview of available differential available.

### Participants concernés

Engineers and executives.

### Contenu

#### Differential GNSS Concept

- Correlated Errors
- Uncorrelated Errors

#### Code Phase Differential Techniques

- WADGPS
- LADGPS

#### Precise differential techniques

- Carrier phase ambiguity resolution
- Multi-frequency advantages
- Algorithms for Integer Ambiguity Searches as the key for precise positioning

#### Error sources of RTK and their mitigation

- Antenna phase center variations (absolute & relative)
- Tropospheric residual errors
- Ionospheric residual error

#### Overview of differential services available

- Space Based Augmentation Systems (e.g., WAAS, EGNOS, etc.)
- Commercial services

For information only : 12 hours

### RESPONSABLE(S) DU STAGE

Anaïs MARTINEAU [Systèmes Informatiques]