Course : Campus Atlas - React Native, creating cross-platform mobile applications

Practical course - 3d - 21h00 - Ref. RNA
Price : 1650 € E.T.

NEW

At the end of the course, participants will be able to create cross-platform mobile applications using React Native.This training program is aimed at employees in the professional branches covered by the OPCO Atlas.

Teaching objectives

At the end of the training, the participant will be able to:

- Knowledge of mobile development frameworks and the specificity of React Native
- Setting up a React Native development environment
- Design the software architecture of a multiplatform mobile application
- Building a fluid, high-performance user interface
- Use the main components and native APIs offered by React Native

Intended audience

For OPCO Atlas members: mobile developers, web developers, architects, technical project managers.

Prerequisites

A working knowledge of JavaScript programming.

Practical details

Hands-on work

Case studies and practical exercises.

Teaching methods

70% pratique – 30% théorie. Pour optimiser le parcours d'apprentissage, des modules e-learning peuvent être fournis avant et après la session présentielle ou la classe virtuelle, sur simple demande du participant.

Course schedule

PARTICIPANTS

For OPCO Atlas members: mobile developers, web developers, architects, technical project managers.

PREREQUISITES

A working knowledge of JavaScript programming.

TRAINER QUALIFICATIONS

The experts leading the training are specialists in the covered subjects. They have been approved by our instructional teams for both their professional knowledge and their teaching ability, for each course they teach. They have at least five to ten years of experience in their field and hold (or have held) decision-making positions in companies.

ASSESSMENT TERMS

The trainer evaluates each participant's academic progress throughout the training using multiple choice, scenarios, hands-on work and more.
Participants also complete a placement test before and after the course to measure the skills they've developed.

1 React, the JavaScript framework for front-end web application development - Pre-training digital learning content

- Introduction to React.
- React principles and operation.
- Creation of a directory of public services.
- To find out more.

Digital activities

Cette formation en ligne présente comment réaliser une application web avec le framework React. Après une présentation de React et de ses grands principes de fonctionnement (composants, extension JSX, props et state), développer une application, de la création du projet, en passant par la création du composant de recherche, jusqu'à l'affichage des résultats sera abordé. Les participants découvriront ainsi comment utiliser le CLI create-react-app qui permet de s'affranchir des configurations complexes. Ils verront également comment faire appel à des API externes pour récupérer des données et les afficher sur une page web.

2 Introduction to mobile development

- Mobile development ecosystem.
- Native versus cross-platform approaches.
- Specific features of React Native.
- Development tools and environment.

Hands-on work

Analyse comparative. Workshop cas d'usage. Setup environnement.

3 Setup and first steps

- Setting up the React Native environment.
- Project structure.
- Tool configuration.
- First deployment.

Hands-on work

Installation. Création projet. Déploiement test.

4 React Native fundamentals

- Essential ES6/ES7 reminders.
- JSX syntax for mobile.
- React Native architecture.
- Debugging tools.
- Principles of mobile development.

Hands-on work

JSX Mobile. Debug et outils. Mini-projet.

5 Application architecture

- State management with Redux.
- Flux architecture.
- State and props patterns.
- Unit testing.

Hands-on work

Configuration Redux. Actions et Reducers. Tests.

TEACHING AIDS AND TECHNICAL RESOURCES

• The main teaching aids and instructional methods used in the training are audiovisual aids, documentation and course material, hands-on application exercises and corrected exercises for practical training courses, case studies and coverage of real cases for training seminars.
• At the end of each course or seminar, ORSYS provides participants with a course evaluation questionnaire that is analysed by our instructional teams.
• A check-in sheet for each half-day of attendance is provided at the end of the training, along with a course completion certificate if the trainee attended the entire session.

TERMS AND DEADLINES

Registration must be completed 24 hours before the start of the training.

ACCESSIBILITY FOR PEOPLE WITH DISABILITIES

Do you need special accessibility accommodations? Contact Mrs. Fosse, Disability Manager, at psh-accueil@orsys.fr to review your request and its feasibility.

6 Patterns and optimization

- React Native design patterns.
- Performance optimization.
- Best practices.
- Advanced debugging.

Hands-on work
Refactoring. Performance.

7 Mobile interfaces

- Native components.
- Flexbox and layout.
- Event management.
- Navigation.

Hands-on work
Composants UI. Layout. Navigation.

8 Animations and UX

- Native animations.
- Smooth transitions.
- Tactile gestures.
- Visual feedback.

Hands-on work
Animations. Interactions tactiles.

9 Data management

- React Native forms.
- Data validation.
- Local storage.
- Offline mode.

Hands-on work
Création de formulaires avancés. Validation et persistance. Mode hors ligne.

10 Synchronization and API

- API REST calls.
- Error handling.
- Synchronization strategies.
- Caching and optimization.

Hands-on work
Intégration API. Optimisation et cache.

11 Native features

- Native APIs (camera, geolocation).
- Permission management.
- Customized native modules.
- Safety.

Hands-on work
APIs natives. Permissions et sécurité. Modules natifs.

12 Deployment

- Blind configuration.
- Publication process.
- Update and maintenance.
- Production monitoring.

Hands-on work
Préparation au déploiement. Publication et monitoring.

13 React, advanced features of the front-end development framework - Post-training digital learning content

- Introduction.
- Component life cycle.
- Refs, fragments and propTypes.
- React Hooks.

Digital activities
This online training course provides in-depth knowledge of React, enabling you to exploit its full potential in front-end development. After setting up the environment, participants will learn about the component lifecycle, references, fragments and propTypes. Participants will then discover Hooks, a key feature that enriches functional components. Each notion will be illustrated by concrete demonstrations.

Dates and locations

REMOTE CLASS
2026 : 2 June, 15 Sep., 17 Nov.

LILLE
2026 : 2 June, 15 Sep., 17 Nov.

PARIS LA DÉFENSE
2026 : 26 May, 8 Sep., 3 Nov.