

Here is a **complete React.js roadmap (Basic → Advanced)** presented as a **clean topic-wise list**.

This is **industry-ready** and perfect for you since you're already learning **MERN stack** and want strong fundamentals before job change.

1. Web Fundamentals (Must Before React)

- HTML5 semantics
- CSS3 (Flexbox, Grid)
- JavaScript ES6+
 - `let, const`
 - Arrow functions
 - Destructuring
 - Spread / Rest
 - Array methods (`map, filter, reduce`)
 - Modules (`import, export`)
 - Promises & `async/await`
 - Event handling
 - DOM basics

2. React Basics

- What is React & why React
 - React vs Vanilla JS
 - SPA (Single Page Application)
 - Virtual DOM
 - JSX
 - React project setup
 - Create React App (CRA)
 - Vite (recommended)
 - Folder structure
 - React Developer Tools
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3. Components & JSX

- Functional components
- Class components (legacy)
- JSX rules
- Fragment (`<> </>`)
- Component reusability
- Rendering elements
- Conditional rendering
- Component naming conventions

4. Props (Properties)

- Passing props
 - Props destructuring
 - Default props
 - Props drilling
 - Children props
 - Props vs State
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5. State & Events

- State concept
 - `useState` hook
 - State updates
 - Handling events
 - Controlled components
 - Forms handling
 - Two-way binding
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6. React Hooks (Core)

- `useState`
 - `useEffect`
 - Dependency array
 - Cleanup
 - `useRef`
 - `useMemo`
 - `useCallback`
 - `useLayoutEffect`
 - Custom Hooks
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7. Lists, Keys & Forms

- Rendering lists using `map`
- Key prop
- Dynamic forms
- Multiple inputs handling
- Validation (basic)



8. Conditional Rendering

- `if/else`
- Ternary operator
- Logical `&&`
- Switch case rendering



9. React Router (Navigation)

- `react-router-dom`
- `BrowserRouter`
- `Routes` & `Route`
- `Link` & `NavLink`
- `useParams`
- `useNavigate`
- `useLocation`
- Nested routes
- 404 page
- Protected routes
- Role-based routing



10. State Management

Local

- Lifting state up
- Context API
- `useContext`

Global

- Redux fundamentals
 - Redux Toolkit
 - Store, Reducer, Slice
 - Actions & Dispatch
 - `useSelector`, `useDispatch`
 - Async thunk
 - Redux vs Context
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11. API Handling

- REST APIs
 - Fetch API
 - Axios
 - GET / POST / PUT / DELETE
 - Loading & error handling
 - Environment variables
 - Pagination
 - Debouncing
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12. Styling in React

- Inline CSS
 - CSS files
 - CSS Modules
 - Styled Components
 - Tailwind CSS
 - Bootstrap
 - Material UI (MUI)
 - SCSS
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13. Advanced React Concepts

- Reconciliation
 - React Fiber
 - Virtual DOM vs Real DOM
 - Lazy loading
 - Code splitting
 - `React.memo`
 - Error Boundaries
 - Portals
 - Forward refs
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14. Authentication & Authorization

- Login / Register flow
- JWT authentication
- Protected routes
- Role-based access
- Token storage

- Session handling
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15. Testing

- Unit testing
 - Jest
 - React Testing Library
 - Component testing
 - Snapshot testing
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16. Performance Optimization

- Memoization
 - Avoid re-renders
 - Key usage optimization
 - Lazy loading components
 - Bundle optimization
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17. Build & Deployment

- Production build
 - Environment configs
 - Netlify
 - Vercel
 - GitHub Pages
 - CI/CD basics
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18. Architecture & Best Practices

- Folder structure
 - Clean code
 - Reusable components
 - Custom hooks
 - MVC pattern in React
 - Atomic design
 - Error handling
 - Logging
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19. Real-World Projects (Must Do)

- CRUD Application
 - Login / Register system
 - Dashboard
 - Admin Panel
 - Blog App
 - E-commerce frontend
 - MERN Stack Project
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20. Interview Preparation

- React lifecycle
 - Hooks interview questions
 - Redux interview questions
 - Performance questions
 - Coding challenges
 - System design basics
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☒ [Recommended Learning Order for You](#)

JavaScript → React Basics → Hooks → Router → API → Redux → Advanced → Projects