# IET – 180 Day Developer Program

Python · Django · Django REST Framework · Flutter
Start Date: **15 Jan 2026** · Duration: **180 Days** · End Date: **13 Jul 2026**

## Phase I · Core Fundamentals & Web Expertise – Weeks 1–8

| WEEK | DATES | TRACK | FOCUS & KEY TOPICS |
|---|---|---|---|
| 1 | 15 Jan – 21 Jan 2026 | Python Basics | **Orientation & Environment Setup** – Python installation, IDE setup, Git/GitHub basics, first scripts; data types, variables, input/output. |
| 2 | 22 Jan – 28 Jan 2026 | Python Flow | **Control Flow & Functions** – if/else, loops, list/dict comprehensions, functions, modules, packages, virtual environments. |
| 3 | 29 Jan – 4 Feb 2026 | Python OOP | **OOP & Error Handling** – Classes/objects, inheritance, polymorphism, magic methods, exceptions, logging, intro to unit tests. |
| 4 | 5 Feb – 11 Feb 2026 | CS Essentials | **Data Structures & OS/Networking** – Lists, sets, dicts, stacks/queues basics, CLI usage, file I/O, basic networking and Git workflows. |
| 5 | 12 Feb – 18 Feb 2026 | HTML | **HTML5 & Structure** – Semantic tags, forms, tables, basic layout; build first multi-page static site. |
| 6 | 19 Feb – 25 Feb 2026 | CSS | **CSS3 & Responsive Design** – Box model, typography, colors, spacing, Flexbox, CSS Grid, mobile-first responsive design. |
| 7 | 26 Feb – 4 Mar 2026 | JavaScript | **JavaScript Fundamentals** – ES6+, variables, functions, arrays, objects, DOM manipulation, events, basic interactive components. |
| 8 | 5 Mar – 11 Mar 2026 | JS + APIs | **Async JS & Mini Project** – Promises, async/await, fetch/REST APIs; build a small responsive front-end app consuming a public API. |

## Phase II · Specialized Frameworks (Django, DRF & Flutter) – Weeks 9–17

| WEEK | DATES | TRACK | FOCUS & KEY TOPICS |
|---|---|---|---|
| 9 | 12 Mar – 18 Mar 2026 | Django Core | **Django Fundamentals** – Project/app structure, settings, URLs, views, templates, models, migrations, Django admin CRUD. |
| 10 | 19 Mar – 25 Mar 2026 | Django Forms | **Forms & Auth** – Django forms, validation, CSRF, messages, user registration, login/logout, basic access control. |
| 11 | 26 Mar – 1 Apr 2026 | Django ORM | **ORM & Class-Based Views** – Relationships (OneToOne, FK, M2M), querysets, generic/class-based views, filtering, pagination. |
| 12 | 2 Apr – 8 Apr 2026 | DRF Basics | **REST APIs with DRF** – Serializers, basic API views, JSON responses, CRUD endpoints for a sample domain. |
| 13 | 9 Apr – 15 Apr 2026 | DRF Advanced | **Advanced DRF** – Viewsets, routers, permissions, throttling, filtering, ordering, pagination, API versioning concepts. |
| 14 | 16 Apr – 22 Apr 2026 | Dart | **Dart & Flutter Setup** – Dart syntax, types, functions, classes; Flutter install, project structure, hot reload, basic app skeleton. |
| 15 | 23 Apr – 29 Apr 2026 | Flutter UI | **Flutter UI Fundamentals** – Widgets tree, Stateless vs Stateful widgets, layout (Row, Column, Container, ListView), navigation. |
| 16 | 30 Apr – 6 May 2026 | Flutter Forms | **Forms & State Management** – TextFields, form validation, managing input; intro to Provider/BLoC or similar for small/medium apps. |
| 17 | 7 May – 13 May 2026 | Flutter + API | **Networking in Flutter** – HTTP requests, JSON parsing, error handling; list/detail/create/update screens consuming your DRF API. |

## Phase III · Integration, Deployment & Capstone – Weeks 18–26

| WEEK | DATES | TRACK | FOCUS & KEY TOPICS |
|---|---|---|---|
| 18 | 14 May – 20 May 2026 | Security | **Full Stack Integration & Security** – REST best practices, refining API contracts, JWT auth in Django/DRF, CORS handling, protected endpoints. |
| 19 | 21 May – 27 May 2026 | Flutter + JWT | **Token-Based Client** – Token storage, attaching tokens to requests, refresh/expiry handling, guarded screens and logout flows. |
| 20 | 28 May – 3 Jun 2026 | Optimization | **Backend Optimization & Reliability** – Query optimization, select_related/prefetch_related, error handling, logging, basic monitoring concepts. |
| 21 | 4 Jun – 10 Jun 2026 | Deploy Django | **Django Deployment** – Production settings, static/media handling, environment variables, Gunicorn/Nginx flow, deploy to cloud. |

| WEEK | DATES | TRACK | FOCUS & KEY TOPICS |
|---|---|---|---|
| 22 | 11 Jun – 17 Jun 2026 | Deploy Flutter | **Flutter Builds** – Web build, Android APK/AAB basics, iOS build concepts, environment configs (dev/stage/prod APIs). |
| 23 | 18 Jun – 24 Jun 2026 | Capstone Plan | **Capstone Planning & Design** – Pick project domain, define features, draft API spec & DB schema, design Flutter screens and flows. |
| 24 | 25 Jun – 1 Jul 2026 | Capstone Backend | **Capstone Backend Implementation** – Django + DRF models, serializers, endpoints, auth; deploy first version of capstone backend to cloud. |
| 25 | 2 Jul – 8 Jul 2026 | Capstone Frontend | **Capstone Frontend & Integration** – Flutter screens, state management, integration with capstone API, end-to-end testing, bug fixing, polish. |
| 26 | 9 Jul – 13 Jul 2026 | Demo & Career | **Wrap-Up, Demos & Placement Prep** – Final polishing, documentation, capstone demo day, portfolio packaging, resume/LinkedIn, mock interviews & Q&A. |