Platform and Backend Engineers

Training track

Backend and platform engineers, tech leads, solution architects

You will be able to build and change wallet, game, identity and routing services so that they pass a lab and hold more than one licence at a time.

- Recommended path
- Optional, worth it
- Alternative route

DURATION	SLIDES	FORMAT	PREREQUISITES	OUTCOME	REGIONS
28.8 h of core lessons + 135 min of fixed region…	357 in lessons + 9 fixed region + 16 extension +…	Twelve to thirteen remote sessions (never more than…	Two years of backend work; Python, SQL, Docker, HTTP…	Passed labs under the 75 percent rule and an…	Two regions: Europe's rules-as-data pair (11.7…

- Business and method 1.1
- Architecture, flows, suppliers 1.3
- Jurisdiction as a dimension 1.5

STAGE 1 · Sessions 1-2
Foundations and reference platform

- Roadmap to requirements sheet 1.2
- Lab: trace a game round 1.4

- Invariants and double entry 2.1
- Payments and treasury 2.3

STAGE 2 · Sessions 2-4
Wallet, ledger and payments

- Lab: post, park and reverse 2.2

- Randomness that survives a lab 3.1
- Certification and change control 3.3

STAGE 3 · Sessions 4-5
Game integrity

- Lab: find and fix the bias 3.2

- KYC state machine and store 4.1
- Controls, registries, lab, adapter 4.3
- Lab: confidence and border cases 4.5

STAGE 4 · Sessions 5-7
Identity, protection and location

- Lab: KYC transitions 4.2
- Location signals and matrix 4.4

- Classes, hub and spoke, gateway 5.1
- Design: three-market placement 5.3

STAGE 5 · Sessions 7-8
Data placement

- Lab: gateway rules, fail closed 5.2

- Evidence pipeline and formats 6.1
- Design: batch reporting pipeline 6.3
- Incidents and the tabletop 6.5

STAGE 6 · Sessions 8-10
Evidence and secure delivery

- Lab: evidence export 6.2
- Security and DevSecOps 6.4

- Region: UK and Europe 7.1

STAGE 7 · Sessions 10-11
Fixed region lessons

- Region: US states 8.1
- Region: Latin America 8.3

STAGE 8 · Sessions 11-12
Region elective (pick one)

- Region: Canada (Ontario) 8.2
- Region: Offshore and APAC 8.4

- Idempotency code clinic 9.1
- A lab finding as a bug report 9.3

STAGE 9 · Sessions 12-13
Track extension lessons

- Integration lab: one request 9.2

Platform and Backend Engineers: training track in detail

Backend and platform engineers, tech leads, solution architects · as of 2026-11

Duration	28.8 h of core lessons + 135 min of fixed region lessons + 200 min of extension lessons + one region (60-185 min) + 60-65 min of session openings: 36.4-38.6 h in all
Slides	357 in lessons + 9 fixed region + 16 extension + 5-20 for the region: 387-402 in all
Format	Twelve to thirteen remote sessions (never more than 3.5 hours of contact each), or seven to seven and a half days on site. Twelve labs and the tabletop. Sell it as two blocks: four days and three days. About 10 hours of post-work for the closing task.
Prerequisites	Two years of backend work; Python, SQL, Docker, HTTP APIs.
Outcome	Passed labs under the 75 percent rule and an idempotent wallet endpoint with a registry check and a gateway rule.
Regions	Two regions: Europe's rules-as-data pair (11.7, 11.8) is fixed, plus one chosen region.
Assessment	Closing quiz (30 questions). Labs under the 75 percent rule. Closing task: take-home build of an idempotent wallet endpoint with a registry check and a gateway rule, checked by script and reviewed.
Certificate	Attendance record only. Hours count toward the full program.

1. Foundations and reference platform Sessions 1-2

1.1 Business and method RECOMMENDED

The gambling business and the five-step method in 75 minutes. Engineers skip the regime comparison and the licence cost case. Lessons 1.1 and 1.3: 75 min, 20 slides.

In the book: Ch. 01 The Online Casino Ecosystem, Ch. 05 Differences Between Betting Sites and Online Casinos, Ch. 07 Casino Implementation Planning and Timeline

1.2 Roadmap to requirements sheet RECOMMENDED

Read one roadmap into testable requirements. Engineers own the architecture column. Lesson 1.4: 60 min, 5 slides.

In the book: Ch. 06 Licensing Guide

1.3 Architecture, flows, suppliers RECOMMENDED

Component inventory, the bet lifecycle and the supplier control plane. Lessons 2.1, 2.2 and 2.3: 105 min, 35 slides.

In the book: Ch. 10 Complete Platform Architecture, Ch. 01 The Online Casino Ecosystem, Ch. 28a Distributed Systems Deep Dive, Ch. 10b Supplier Integration Control Plane, Ch. 09 Legal Framework and Contracts

1.4 Lab: trace a game round RECOMMENDED

Follow one game round through the reference platform, service by service, in logs and tables. Lesson 2.4: 70 min, 4 slides.

In the book: Ch. 10 Complete Platform Architecture, Ch. 10b Supplier Integration Control Plane

1.5 Jurisdiction as a dimension RECOMMENDED

Why market rules belong in configuration per jurisdiction. The sizing exercise (2.5) stays in the full program. Lesson 2.6: 25 min, 10 slides.

In the book: Ch. 27c Migrating a Single-Jurisdiction Casino Platform to Hub & Spoke, Ch. 47 Platform Onboarding: From Contract to First Real-Money Bet, Ch. 47b Configuration and Rules Distribution -- Feature Flags, Jurisdiction Rules, and the Propagation Model

2. Wallet, ledger and payments Sessions 2-4

2.1 Invariants and double entry RECOMMENDED

The rules a wallet may never break and the ledger design that makes them checkable. Lessons 3.1 and 3.2: 80 min, 24 slides.

In the book: Ch. 36 Financial Operations, Ch. 10 Complete Platform Architecture, Ch. 46 Building a Brazilian Betting Platform: Architecture, Compliance, and Implementation, Ch. 36b The Financial Truth Layer -- Ledger, Treasury, and Reconciliation

2.2 Lab: post, park and reverse RECOMMENDED

Post, park and reverse entries, then prove the trial balance still closes. Lesson 3.3: 65 min, 4 slides.

In the book: Ch. 36b The Financial Truth Layer -- Ledger, Treasury, and Reconciliation, Ch. 36 Financial Operations

2.3 Payments and treasury RECOMMENDED

Payment layers and orchestration, then float, segregation and reconciliation. Lessons 3.4 and 3.5: 80 min, 22 slides.

In the book: Ch. 36 Financial Operations, Ch. 46 Building a Brazilian Betting Platform: Architecture, Compliance, and Implementation, Ch. 33d Disputes, Chargebacks, and Player Support, Ch. 36b The Financial Truth Layer -- Ledger, Treasury, and Reconciliation

3. Game integrity Sessions 4-5

3.1 Randomness that survives a lab RECOMMENDED

What an RNG must do to pass statistical and implementation review. Lesson 4.1: 35 min, 12 slides.

In the book: Ch. 17 Random Number Generation (RNG)

3.2 Lab: find and fix the bias RECOMMENDED

Find a biased mapping in RNG code, fix it and write the test that would have caught it. Lesson 4.3: 60 min, 4 slides.

In the book: Ch. 17 Random Number Generation (RNG), Ch. 32 Testing and QA in Gambling

3.3 Certification and change control RECOMMENDED

The GLI-19 submission, then which changes go back to the lab and how to structure a codebase so most do not. Lessons 4.4 and 4.5: 50 min, 19 slides.

In the book: Ch. 17 Random Number Generation (RNG), Ch. 25 GLI-GSF Compliance Framework: Online Gaming Information Security, Ch. 06 Licensing Guide, Ch. 32 Testing and QA in Gambling, Ch. 23 DevSecOps for iGaming

4. Identity, protection and location Sessions 5-7

4.1 KYC state machine and store RECOMMENDED

KYC transitions and an evidence store with encryption, access control and retention. Lessons 5.1 and 5.2: 65 min, 22 slides.

In the book: Ch. 24d KYC Evidence Lifecycle, Ch. 20 Hardware Security Module Infrastructure, Ch. 20b OpenBao Operations: Secret Engines, Dynamic Credentials and Disaster Recovery

4.2 Lab: KYC transitions RECOMMENDED

Implement the transitions and a retention report. Lesson 5.3: 60 min, 4 slides.

In the book: Ch. 24d KYC Evidence Lifecycle

4.3 Controls, registries, lab, adapter RECOMMENDED

Where the player protection controls live, self-exclusion registries, a fail-closed check with cache and audit log, then one adapter for several registries. Lessons 6.1, 6.2, 6.3 and 6.6: 155 min, 29 slides.

In the book: Ch. 26 Responsible Gaming and Player Protection Systems, Ch. 26b Self-Exclusion Registries: From API to Audit Trail

4.4 Location signals and matrix RECOMMENDED

Multi-signal location checks and the jurisdiction matrix that turns a position into a decision. Lessons 7.1 and 7.2: 60 min, 21 slides.

In the book: Ch. 24e Geofencing and Location Verification, Ch. 24 Security and Compliance

4.5 Lab: confidence and border cases RECOMMENDED

Score location confidence and handle players near a border. Lesson 7.3: 60 min, 4 slides.

In the book: Ch. 24e Geofencing and Location Verification

5. Data placement Sessions 7-8

5.1 Classes, hub and spoke, gateway RECOMMENDED

Data classification, hub and spoke topology and the jurisdiction gateway. Lessons 8.1, 8.2 and 8.3: 125 min, 35 slides.

In the book: Ch. 27 Data Residency and Backup/Recovery, Ch. 10 Complete Platform Architecture, Ch. 27c Migrating a Single-Jurisdiction Casino Platform to Hub & Spoke, Ch. 27b The Jurisdiction Transfer Gateway and Cookie Consent, Ch. 34b Data Governance for iGaming Platforms

5.2 Lab: gateway rules, fail closed RECOMMENDED

Write gateway rules and test that a missing rule blocks the transfer. Lesson 8.4: 65 min, 4 slides.

In the book: Ch. 27b The Jurisdiction Transfer Gateway and Cookie Consent

5.3 Design: three-market placement RECOMMENDED

Place every data class for an operator in three markets and log the trade-offs. Lesson 8.7: 70 min, 5 slides.

In the book: Ch. 27 Data Residency and Backup/Recovery, Ch. 27c Migrating a Single-Jurisdiction Casino Platform to Hub & Spoke, Ch. 10 Complete Platform Architecture

6. Evidence and secure delivery Sessions 8-10

6.1 Evidence pipeline and formats RECOMMENDED

Evidence as a product: sources, staging, signing, delivery, then the report formats and deadlines the pipeline must hit. Lessons 9.1 and 9.2: 75 min, 24 slides.

In the book: Ch. 25b Regulatory Reporting and Evidence Export, Ch. 06 Licensing Guide

6.2 Lab: evidence export RECOMMENDED

Build an export that writes its own audit entry. Lesson 9.3: 65 min, 4 slides.

In the book: Ch. 25b Regulatory Reporting and Evidence Export, Ch. 24d KYC Evidence Lifecycle

6.3 Design: batch reporting pipeline RECOMMENDED

A batch pipeline with durable staging that survives a regulator endpoint being down. Lesson 9.6: 50 min, 5 slides.

In the book: Ch. 46 Building a Brazilian Betting Platform: Architecture, Compliance, and Implementation, Ch. 25b Regulatory Reporting and Evidence Export

6.4 Security and DevSecOps RECOMMENDED

Zones, mTLS, secrets and HSM, then the delivery pipeline of a certified environment. Lessons 10.1 and 10.2: 65 min, 22 slides.

In the book: Ch. 24 Security and Compliance, Ch. 20 Hardware Security Module Infrastructure, Ch. 20b OpenBao Operations: Secret Engines, Dynamic Credentials and Disaster Recovery, Ch. 24h Mutual TLS Between Kubernetes Services for iGaming Platforms, Ch. 23c Secrets Management and Git Hygiene for iGaming Engineering, Ch. 10 Complete Platform Architecture

6.5 Incidents and the tabletop RECOMMENDED

Incident management and regulator notification, then the tabletop on the wallet double credit with the engineering role. Lessons 10.5 and 10.4: 110 min, 19 slides.

In the book: Ch. 35 Incident Management, Ch. 35b Cash-Flow Integrity Incident Response, Ch. 39 Case Study -- Security Incident Response

7. Fixed region lessons Sessions 10-11

7.1 Region: UK and Europe RECOMMENDED

Six licences in two families: point-of-consumption markets (Great Britain, Sweden, Denmark) and hub licences (Malta, Gibraltar, Isle of Man). Lessons 11.7 and 11.8: 135 min, 9 slides.

In the book: Ch. 47b Configuration and Rules Distribution -- Feature Flags, Jurisdiction Rules, and the Propagation Model, Ch. 27b The Jurisdiction Transfer Gateway and Cookie Consent, Ch. 26 Responsible Gaming and Player Protection Systems, Ch. 27c Migrating a Single-Jurisdiction Casino Platform to Hub & Spoke, Ch. 29c European Datacenter Infrastructure for Regulated Gaming, Ch. 10 Complete Platform Architecture

8. Region elective (pick one) Sessions 11-12

8.1 Region: US states ALTERNATIVE

New Jersey, Pennsylvania and Michigan: a land-based partner, servers inside the state and a location check on every session. This track takes the lab and the design exercise of the chosen region, with the lecture they depend on. If the track must shrink, make the chosen region an add-on (minus 1 to 3 hours). Lessons 12.4, 12.5 and 12.6: 185 min, 20 slides.

In the book: Ch. 29a On-Premises Infrastructure for US-Regulated iGaming, Ch. 29b Datacenter Infrastructure for Regulated Gaming, Ch. 24e Geofencing and Location Verification, Ch. 10 Complete Platform Architecture, Ch. 27 Data Residency and Backup/Recovery, Ch. 27c Migrating a Single-Jurisdiction Casino Platform to Hub & Spoke

8.2 Region: Canada (Ontario) ALTERNATIVE

Ontario: registration with the AGCO, an operating agreement with iGaming Ontario, and standards written as outcomes. This track takes the lab and the design exercise of the chosen region, with the lecture they depend on. If the track must shrink, make the chosen region an add-on (minus 1 to 3 hours). Lessons 13.2 and 13.3: 90 min, 15 slides.

In the book: Ch. 25 GLI-GSF Compliance Framework: Online Gaming Information Security, Ch. 26b Self-Exclusion Registries: From API to Audit Trail, Ch. 24e Geofencing and Location Verification, Ch. 40 Case Study -- Launching in a New Regulated Market, Ch. 10 Complete Platform Architecture, Ch. 27 Data Residency and Backup/Recovery

8.3 Region: Latin America ALTERNATIVE

Brazil, Colombia, Mexico and Buenos Aires. Brazil is taught as a design problem behind a legal status gate, because MP 1.394/2026 banned fixed-odds betting in September 2026. This track takes the lab and the design exercise of the chosen region, with the lecture they depend on. If the track must shrink, make the chosen region an add-on (minus 1 to 3 hours). Lessons 14.4, 14.5 and 14.6: 170 min, 17 slides.

In the book: Ch. 46 Building a Brazilian Betting Platform: Architecture, Compliance, and Implementation, Ch. 25b Regulatory Reporting and Evidence Export, Ch. 26b Self-Exclusion Registries: From API to Audit Trail, Ch. 27 Data Residency and Backup/Recovery, Ch. 29f Latin America Datacenter Infrastructure for Regulated Gaming

8.4 Region: Offshore and APAC ALTERNATIVE

Curacao under the LOK and the Philippines under PAGCOR, where the roadmap reports new operator accreditations frozen and the partner route as the open one. This track takes the lab and the design exercise of the chosen region, with the lecture they depend on. If the track must shrink, make the chosen region an add-on (minus 1 to 3 hours). Lesson 15.4: 60 min, 5 slides.

In the book: Ch. 27c Migrating a Single-Jurisdiction Casino Platform to Hub & Spoke, Ch. 27b The Jurisdiction Transfer Gateway and Cookie Consent, Ch. 24e Geofencing and Location Verification, Ch. 47d Casino as a Service: White-Label Provisioning at the Press of a Button

9. Track extension lessons Sessions 12-13

9.1 Idempotency code clinic OPTIONAL

Participants review three wallet handlers for retry and duplicate-callback bugs, fix all three and write the tests. It extends the Module 03 lab with a failure that is common in game provider integrations. Lab environment L03b-idempotency-clinic. Not built yet; estimate 90 min, 4 slides (lab).

In the book: Ch. 36 Financial Operations, Ch. 10b Supplier Integration Control Plane, Ch. 28a Distributed Systems Deep Dive

9.2 Integration lab: one request OPTIONAL

One request goes through the wallet, a registry check and the jurisdiction gateway together. Participants wire the three services from the separate Module 03, 06 and 08 labs, then break each one in turn and check that the request still fails closed. Lab environment L20-integration. Not built yet; estimate 90 min, 4 slides (lab).

In the book: Ch. 27 Data Residency and Backup/Recovery, Ch. 26b Self-Exclusion Registries: From API to Audit Trail, Ch. 10b Supplier Integration Control Plane

9.3 A lab finding as a bug report OPTIONAL

How to read a test lab's non-compliance finding, reproduce it, fix it and answer in the form the lab expects, including version and build hash. Not built yet; estimate 20 min, 8 slides (lecture).

In the book: Ch. 25 GLI-GSF Compliance Framework: Online Gaming Information Security, Ch. 32 Testing and QA in Gambling

Common pitfalls

- Reaching for exactly-once delivery when the wallet needs idempotency keys and a ledger that can prove itself.
- Hard-coding one market's rules in a service and calling it configuration later.
- Failing open on a registry or location check because the dependency timed out.
- Treating logs as debugging output. Some of them are evidence with a retention period.
- Optimizing latency before reading which data is allowed to leave the market.
- Skipping the evidence step of the method because the design already works.

Sources

1. UK Gambling Commission, testing strategy for remote gambling and software technical standards, summary
   https://www.gamblingcommission.gov.uk/strategy/testing-strategy-for-compliance-with-remote-gambling-and-software-technical/1-summary
2. GLI, iGaming Workshops
   https://gaminglabs.com/services/igaming/igaming-workshops/
3. AGCO, Registrar's Standards for Internet Gaming (full text)
   https://agco.ca/en/book/export/html/245361
4. Google SRE book, chapter 28, Accelerating SREs to On-Call and Beyond
   https://sre.google/sre-book/accelerating-sre-on-call/
5. Brazil, Medida Provisória 1.394 of 25 September 2026 (Planalto)
   https://www.planalto.gov.br/ccivil_03/_ato2023-2026/2026/Mpv/mpv1394.htm

Companion to *The Backend of Luck* and its jurisdiction roadmaps. Hours and slide counts come from the lesson tables in the training plan.