3. Detailed Module Breakdown (17 Modules)

This section provides a comprehensive analysis of each module in the ATS HR Platform. Each module is designed to operate independently while contributing to a unified, interconnected workflow across recruitment, HR operations, vendor relationships, financial management, and compliance.

The following breakdown is written for **developers, QA, HR, finance teams, and management**, ensuring every stakeholder fully understands how each module operates and interacts with the overall platform.

3.1 Module 1 — Authentication & Access Control

Purpose

To ensure secure, role-based access to the platform, enabling users to interact only with the modules relevant to their responsibilities. This is the foundation of all application workflows.

Key Capabilities

- JWT authentication
- Login, logout, session management
- 8 predefined user roles
- Role-based access control
- Route guards & permissions
- Session expiry management

Supported User Roles

- Admin
- Recruiter
- Account Manager
- Internal HR
- Consultant
- Employee
- Accounts/Finance
- Vendor/Sub-company User

Core Features

1. **Login & Authentication**
    - Email/password based login

    - Token generation with expiry
    - Auto-refresh mechanisms

2. **Role-Based Access Control (RBAC)**
    - Modules, pages, actions controlled by permissions
    - Frontend UI visibility adjusts dynamically
3. **Security Framework**
    - Password encryption
    - Protected routes
    - Session validation across requests

Workflow

```
User Login → Credentials Validated → JWT Issued → Role Permissions
Loaded → UI Adjusted → Access Granted to Allowed Modules
```

Dependencies

- Users table
- Permissions matrix
- Frontend route guards
- Backend middleware

Business Value

Ensures governance, data security, and controlled access across a multi-role staffing environment.

3.2 Module 2 — Candidate Management + Classification

Purpose

To manage the entire candidate intake lifecycle: sourcing, parsing, screening, and classification into Consultant or Employee pathways.

Key Capabilities

- Candidate database
- Resume parsing (AI)
- Screening & evaluation
- Internal notes & feedback
- Status transitions
- Classification workflow

- Timeline tracking

Sub-Sections

3.2.1 Candidate Intake

Candidates enter through:

- Website registration
- Recruiter adds manually
- Vendor uploads
- Import from legacy systems

3.2.2 AI Resume Parsing

- Extracts structured data
- Reduces manual data entry
- Adds skills, experience, education

3.2.3 Screening Workflow

Candidate → Screening → Shortlist/Reject
Recruiters add notes & evaluation scores.

3.2.4 Classification Workflow (Critical)

This workflow decides:

→ **Consultant Path (90%)**
or
→ **Employee Path (10%)**

Once classification is done:

- Consultant flows unlock
- Employee HRMS flows unlock

3.2.5 Candidate Timeline

Tracks:

- Status changes
- Interview activity
- Screening notes
- Classification decisions

Workflow

```
Candidate Intake → AI Parsing → Screening → Status Update →
Classification → Consultant/Employee Module Activation
```

Stakeholders

- Recruiters
- HR Team
- Vendors
- Account Managers

Business Value

Converts raw candidate data into deployable workforce assets

3.3 Module 3 — Job / Requirement Management

Purpose

To manage job postings and client requirements, linking candidates to specific roles.

Key Capabilities

- Create and publish job requirements
- Add required skills, experience, salary range
- Submit candidates from pool
- Match candidates using AI scoring

Sub-Sections

3.3.1 Job Creation

Recruiters create openings for internal or client needs.

3.3.2 Job Publishing

Published jobs appear to recruiters for quick matching.

3.3.3 Candidate Submissions

Candidates selected → submitted to client requirements.

3.3.4 Job Status Management

Draft → Active → Closed → Archived

3.3.5 Matching Engine Integration

AI returns top-matching candidates.

Workflow

```
Job Created → Published → Candidate Sourced →
Screened → Submitted to Client → Status Tracked
```

Stakeholders

- Recruiters
- Account Managers
- Vendors

Business Value

Accelerates client fulfillment and reduces time-to-hire

3.4 Module 4 — Interview Management (AI + Manual)

Purpose

To streamline the coordination, scheduling, and execution of interviews.

Key Capabilities

- Manual interviews
- AI-driven interviews
- Calendar integrations
- Feedback submission
- Interview scoring

Sub-Sections

3.4.1 Interview Scheduling

Phone, video, in-person interviews.

3.4.2 AI Interview Engine

- Auto question generation

- Real-time scoring
- Interview summary report

3.4.3 Interview Feedback

Recruiters/managers record:

- Ratings
- Comments
- Hire/no-hire recommendations

3.4.4 Calendar View

All interviews shown in daily/weekly view.

Workflow

```
Candidate Selected → Interview Scheduled →
Manual/AI Interview Conducted → Feedback → Next Step
```

Stakeholders

- Recruiters
- Account Managers
- Clients
- Candidates

Business Value

Reduces recruiter workload, increases evaluation accuracy

3.5 Module 5 — Consultant Management (90% Workforce)

(One of the most critical modules; drives revenue)

Purpose

To manage consultants through the deployment lifecycle — from readiness to billing.

Key Capabilities

- Consultant pool
- Readiness tracking
- Client submission

- Deployment setup
- Contract management
- Attendance + timesheet automation
- Payroll linkage
- Invoice generation

Sub-Sections

3.5.1 Consultant Pool

All deployable consultants listed with:

- Skills
- Availability
- Rate
- Pipeline stage

3.5.2 Client Mapping & Submission

Consultants mapped to client requirements.

3.5.3 Deployment Setup

When selected:

- Deployment record created
- Start/end dates
- Billing model (hourly/monthly)

3.5.4 Contract Management

Clients upload:

- PO
- SOW
- Contract validity dates

3.5.5 Compliance & Document Management

PAN, Aadhar, certifications.

Workflow

```
Consultant Classified → Added to Pool → Submitted to Client →
Interview → Selection → Deployment → Attendance → Timesheet → Payroll
→ Invoice
```

Stakeholders

- Recruiters
- Account Managers
- Consultants
- Finance

Business Value

This module directly drives **topline revenue**.

3.6 Module 6 — Employee Management (Internal 10%)

Purpose

To manage the full lifecycle of internal employees who support the organization's day-to-day operations HR, Accounts, Admin, Recruiters, Coordinators, etc.
This module ensures that internal employees follow standardized onboarding, compliance, and payroll processes.

Key Capabilities

- Convert hired candidate → Employee
- Employee master data management
- Onboarding workflows
- Document collection
- Attendance & leave management
- Salary payroll processing
- Compliance tracking
- Exit process and Full & Final (F&F) settlement

Sub-Sections & Details

3.6.1 Employee Creation

Employees enter the system in two ways:

1. As hired candidates
2. Via direct HR creation (for staff roles)

The system assigns:

- Employee ID
- Department

- Role
- Reporting manager

3.6.2 Onboarding Workflow

The onboarding checklist ensures consistent documentation and compliance for each new joiner, including:

- Personal information
- PAN & Aadhar
- Educational certificates
- Experience letters
- Bank details
- Signed offer letter & NDA
- Background verification initiation

3.6.3 Document Management

Employees upload documents through a guided list.
HR verifies and approves each document.

3.6.4 Employment Lifecycle

Employees move through defined statuses:

```
onboarding → active → on_notice → resigned → exited → alumni
```

3.6.5 Exit Workflow

Includes:

- Resignation notice
- Pending task clearance
- Asset return
- Compliance clearance
- Final salary calculation

Workflow

```
Candidate Hired → Convert to Employee → Onboarding → Active Employment →

Attendance/Leave → Payroll → Appraisal (optional future) → Exit
```

Stakeholders

- HR
- Internal employees
- Accounts
- Line managers

Business Value

Provides HR governance, compliance adherence, and smooth lifecycle processes for internal staff.

3.7 Module 7 — Vendor/Sub-Company Management

Purpose

To manage third-party vendors or sub-companies supplying consultants/resources.
This module ensures transparent collaboration and accurate payout management.

Key Capabilities

- Vendor onboarding
- Vendor consultant submission
- Margin assignment
- Payout calculation
- Compliance document tracking

Sub-Sections

3.7.1 Vendor Master

Stores:

- Company details
- Primary contacts
- Agreement terms
- Payment rules (Net 15, Net 30, etc.)

3.7.2 Vendor Candidate Submission

Vendors upload candidate profiles, including:

- Resume
- Skills
- Experience
- Billing rate

These candidates enter the **general candidate pool** but are tagged as *Vendor sourced*.

3.7.3 Margin Management

For vendor supplied consultants:

```
Client billing rate − Vendor payout rate = Margin earned by ATS
```

3.7.4 Vendor Compliance Tracking

Includes:

- GST certificate
- Agreement/NDA
- W-9 or relevant tax forms
- Insurance documents

3.7.5 Payout Lifecycle

Consists of:

1. Approved timesheets
2. Vendor payout calculation
3. Deduction handling (TDS etc.)
4. Release of payments

Workflow

```
Vendor Onboard → Upload Candidates → Candidate Screening → Client
Selection → Deployment → Timesheet Approval → Vendor Payout → Reports
```

Stakeholders

- Vendors
- Recruiters
- Accounts
- Management

Business Value

Strengthens the supply chain to fulfill urgent or high-volume client requirements.

3.8 Module 8 — Client Relationship Management (CRM)

Purpose

To manage client data, rate cards, requirements, contracts, and deployments – essential for business acquisition and retention.

Key Capabilities

- Client master repository
- Contact management
- Multiple rate cards
- Contract documents
- Requirements and job tracking
- Deployment visibility
- Billing cycle management

Sub-Sections

3.8.1 Client Master

Stores client-level details:

- Organization details
- GST/Tax ID
- Service terms
- Billing cycles
- Primary and secondary contacts

3.8.2 Rate Card Management

Mapping skill → rate → billing model.

3.8.3 Requirements

Account managers create requirements which recruiters fulfill.

3.8.4 Deployment View

Shows:

- Consultants currently deployed
- Start/end dates
- Timesheet health
- Billing health

3.8.5 Contract Documentation

Includes:

- MSA
- SOW
- Purchase Orders
- Renewal details

Workflow

```
Client Added → Rate Cards Created → Requirements Received →

Consultants Submitted → Interviews → Deployment → Billing
```

Stakeholders

- Account Managers
- Recruiters
- Finance
- Clients

Business Value

Improves client satisfaction, transparency, and account management performance.

3.9 Module 9 — Background Verification (BGC)

Purpose

To ensure compliance and reduce risk by validating employee and consultant backgrounds.

Key Capabilities

- BGC initiation
- Multi-component verification
- Automated reminders
- Dashboard visibility
- Expiry/performance reports

Sub-Sections

3.9.1 BGC Initiation

Triggered automatically during:

- Employee onboarding
- Consultant deployment (client-mandated)

3.9.2 Verification Components

- Identity
- Education
- Employment history
- Criminal record
- Address
- Drug test (optional)

3.9.3 BGC Workflow

```
initiated → in_progress → completed → verified/fail
```

3.9.4 Escalation Rules

Expired or failed BGC alerts HR instantly.

3.9.5 Reports

Includes:

- Compliance summary
- Pending verifications
- Failed cases
- Expiring verifications

Workflow

```
Employee/Consultant Added → BGC Initiated → Vendor Performs Checks →

Status Updated → HR Approves → Compliance Dashboard Updated
```

Stakeholders

- HR
- BGC Vendors
- Clients (view-only)

Business Value

Protects the organization from compliance and reputational risk.

3.10 Module 10 — Attendance Management

Purpose

To track daily presence records for consultants (billable) and employees (internal).

Key Capabilities

- Daily clock-in/clock-out
- Client approval (consultants)
- Attendance correction requests
- Automatic integration with payroll

Sub-Sections

3.10.1 Consultant Attendance

Consultants log attendance manually or through automated methods.
Client-side supervisors approve entries.

3.10.2 Employee Attendance

Employees follow normal shift or flexible working hour patterns.

3.10.3 Corrections Workflow

Employees/consultants can request corrections → Manager approves → Finalized.

Workflow

```
Attendance Marked → Approval (Consultants) → Correction Window →
Payroll Inputs
```

Stakeholders

- Consultants
- Employees
- HR
- Client Managers

Business Value

Ensures accurate payroll and prevents under/over-billing.

3.11 Module 11 — Leave Management

Purpose

To track leave balances, requests, approvals, and rule-based leave allocation.

Key Capabilities

- Leave types (CL, SL, EL, etc.)
- Policy configuration
- Manager approval workflow
- Leave balance auto-updates

Sub-Sections

3.11.1 Leave Application

Employees request leave with:

- Reason
- Type
- Dates

3.11.2 Approval Workflow

Manager → HR → System Updates Balance.

3.11.3 Calendars & Cutoff Rules

- Monthly cutoffs
- Yearly carry forward policies

Workflow

```
Leave Requested → Manager Approval → Balance Adjusted → Payroll
Notified
```

Stakeholders

- Employees
- HR
- Managers

Business Value

Ensures fair leave governance and reduces disputes.

3.12 Module 12 — Timesheet Management

Purpose

To capture weekly/monthly billable hours of consultants, ensure multi-level approvals, and feed accurate data into payroll and finance systems.
This is one of the most financially sensitive modules.

Key Capabilities

- Weekly timesheet entry
- Multi-level approval (Manager → Client)
- Automated total-hours calculation
- Validation rules
- Timesheet locking after approval
- Integration with payroll and invoicing

Sub-Sections

3.12.1 Timesheet Entry Interface

Consultants enter:

- Hours worked
- Project code
- Work notes (optional)
- Weekly breakdown (Mon–Sun)

The UI enforces:

- Minimum/maximum hours
- Non-overlapping entries
- Active deployment validation

3.12.2 Approval Workflow

Timesheet approval involves:

1. **Primary Manager Approval**
2. **Client Manager Approval** (optional but common in outsourcing)
3. **Finance Visibility**

Rejections push the timesheet back with comments.

3.12.3 Timesheet Locking

Once fully approved:

- Timesheet becomes read-only
- Moves into payroll + invoice queue

3.12.4 Escalation & Reminders

Automatic reminders are sent if:

- Submission is delayed
- Approvals pending
- Approvals expired

Workflow

```
Timesheet Submitted → Manager Approval → Client Approval →

Locked → Payroll/Invoice Engine
```

Stakeholders

- Consultants
- Client Managers
- Delivery/Project Managers
- Accounts/Finance

Business Value

Accurate timesheets prevent:

- Revenue leakage
- Incorrect vendor payouts
- Client disputes

This is the single most important module for **cash flow health**.

3.13 Module 13 — Payroll Management

(For consultants + internal employees)

Purpose

To automate payroll processing for two categories of people:

1. **Consultants (90%) — variable/contractual payments**
2. **Internal Employees (10%) — salary-based payments**

Payroll is influenced by:

- Attendance
- Approved timesheets
- Leave balances
- Rate cards
- Statutory rules

Key Capabilities

- Payroll calculation engine
- Payslip generation
- Statutory deduction processing
- Rate card management
- Integration with finance/invoicing
- Support for vendor payouts

Sub-Sections

3.13.1 Consultant Payroll

Consultant payments depend on:

- **Billable hours × Billing rate**
- Deductions (PF/ESI/TDS if applicable)
- Expense reimbursements
- Overtime rules (if client-specific)

Consultant payout models:

- Monthly rate
- Hourly rate
- Fixed contract rate

3.13.2 Employee Payroll

Employees have salary components:

- Basic

- HRA
- Allowances
- Variable pay
- Statutory deductions

3.13.3 Statutory Processing

Covers:

- PF
- ESI
- PT
- TDS

3.13.4 Payroll Output

Produces:

- Payslips
- Salary register
- Consultant payout statements
- Vendor payout sheets

Workflow

```
Attendance + Leave + Timesheet → Payroll Engine →

Payslip / Payout Generation → Exports to Finance
```

Stakeholders

- HR
- Finance
- Consultants
- Employees

Business Value

Ensures accurate payouts, statutory compliance, and predictable cash flow.

3.14 Module 14 — Finance & Invoicing

Purpose

To ensure accurate and timely financial operations by transforming operational data (timesheets, deployments, rate cards) into billable invoices and vendor payouts.

This module directly affects:

- Revenue
- Cash flow
- Profitability
- Vendor relationships

Key Capabilities

- Client invoice generation
- Vendor payout processing
- Revenue forecasting
- Payment tracking
- Tax and statutory compliance

Sub-Sections

3.14.1 Client Invoices

Invoices include:

- Consultant billable hours
- Rate card calculations
- Tax components (GST, VAT)
- Payment due date
- Invoice number

PDF generation included.

3.14.2 Vendor Payouts

If a consultant belongs to a vendor:

```
Client Bill Amount − ATS Margin = Vendor Payout
```

This ensures transparency in vendor payments.

3.14.3 Payment Tracking

Finance team updates:

- Paid
- Partially paid

- Overdue
- In dispute

3.14.4 Reconciliation

Supports:

- Client invoice vs vendor payout
- Invoice aging (30/60/90 days)
- Margin analysis

Workflow

```
Timesheets Approved → Payroll Calculated → Invoice Generated →

Client Payment → Vendor Payout → Finance Dashboard Updates
```

Stakeholders

- Accounts/Finance
- Account Managers
- Clients
- Vendors

Business Value

Strengthens financial governance and protects long-term profitability.

3.15 Module 15 — Dashboards & Analytics

Purpose

To provide real-time visibility into operational, financial, and workforce performance.

Dashboards serve as a control tower for management.

Key Dashboards

3.15.1 Recruitment Pipeline Dashboard

Shows:

- Candidate stages
- Job status

- Recruiter performance
- Time-to-fill metrics

3.15.2 Consultant Utilization Dashboard

Shows:

- Total consultants
- Deployed vs bench
- Revenue per consultant
- Expiring deployments

3.15.3 Revenue Forecasting Dashboard

Shows:

- Month-on-month projections
- Active contract values
- Collection status

3.15.4 Client & Vendor Billing Dashboard

Side-by-side views of:

- Client invoices
- Vendor payouts
- Margin earned

3.15.5 Statutory Compliance Dashboard

Shows:

- PF/ESI/TDS summary
- Overdue compliance tasks
- Payroll exceptions

3.15.6 BGC Compliance Dashboard

Shows:

- Completed
- Failed
- Pending
- Expiring
  BGC cases.

Workflow

```
All modules → Analytics Engine → Dashboards → Management uses insights
for decisions
```

Stakeholders

- Management
- Finance
- HR
- Operations

Business Value

Turns data into intelligence for decision-making.

3.16 Module 16 — Admin Settings

Purpose

To configure system-wide policies, roles, permissions, and workflows.

This module enables the platform to adapt to organizational nuances.

Key Capabilities

- Role & permission management
- Attendance policy setup
- Leave policy setup
- Payroll rule configuration
- Notification triggers
- Integrations / API keys

Sub-Sections

3.16.1 Roles & Permissions

Admins can:

- Add/modify role capabilities
- Restrict access to specific modules

3.16.2 Attendance/Leave Policies

Configurable:

- Shift timings
- Overtime logic
- Leave accrual rates
- Carry-forward rules

3.16.3 Payroll Rules

Supports:

- Salary formulas
- Statutory limits
- Rate card structures

3.16.4 Notifications & Alerts

Configurable email/SMS reminders:

- Timesheet pending
- Attendance anomalies
- Invoice overdue

Workflow

```
Admin Updates Config → System Applies Rules →

All Modules Follow Updated Policies
```

Stakeholders

- Admin
- HR
- Finance

Business Value

Ensures the system stays flexible as the organization evolves.

3.17 Module 17 — Audit Logs & Notifications Engine

Purpose

To ensure transparency, traceability, and compliance across all modules.

Key Capabilities

- Track every user action
- Maintain versioned historical logs
- Store event-based system activity
- Send real-time notifications

Sub-Sections

3.17.1 Audit Logs

Tracks:

- CRUD operations
- Login attempts
- Permission changes
- Payroll/invoice generation
- Timesheet approvals

3.17.2 Notifications Engine

Supports:

- Email notifications
- In-app alerts
- Escalation rules

3.17.3 Error Logging

Tracks:

- API failures
- Workflow breakpoints
- Integration errors

Workflow

```
Any System Action → Logged → Notification Trigger (If applicable) →

Visible to Admin → Audit Reports Generated
```

Stakeholders

- Admin
- Finance

- HR
- Compliance

Business Value

Ensures governance, reduces risk, and maintains audit readiness.