REQUIREMENTS TRACEABILITY MATRIX

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LEARning management system FOR SYS college

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1. **Module Codes and Description**

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| # | Code | Module | Description |
| 1 | CM | Course Management | Requirements related to creating, editing, and managing courses, modules, and content. |
| 2 | CD | |  | | --- | |  |  |  | | --- | | Content Delivery | | Requirements for how students access course materials, interact with content, and receive updates. |
| 3 | ES | Enrollment & Scheduling | Covers student enrollment, course assignment, academic calendars, and timetable management. |
| 4 | UM | User Management | Requirements for user registration, login, role-based access control, and authentication. |
| 5 | AA | Assignment & Assessment | Creating, submitting, grading, and managing assignments and exams. |
| 6 | AR | Analytics & Reporting | Dashboards, KPI tracking, and performance summaries. |
| 7 | RP | Compliance & Reporting | Institutional reports, attendance, and audit compliance. |

**BR =** Business Requirement

**FR =** Functional Requirement

1. **Requirement Traceability Matrix (RTM)**

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| # | BR ID | REQUIREMENT | FR ID | Use Case | Test Case |
| 1 | BR-01 | Faculty can create and manage course content and assessments | FR-CM-01 to FR-CM-04, FR-AA-01 to FR-AA-05 | Create Course, Manage Course, Upload Content, Manage Grades |  |
| 2 | BR-02 | Students can access content, view courses, and submit assignments | FR-CD-01 to FR-CD-04, FR-AA-02 | View Content, View Courses, Submit Assignment |  |
| 3 | BR-03 | Admin staff can enroll students and manage course schedules | FR-ES-01 to FR-ES-04 | Enroll Student, Manage Schedule |  |
| 4 | BR-04 | Department heads can access dashboards and performance analytics | FR-AR-01 to FR-AR-03 | View Dashboard, Analyze Performance |  |
| 5 | BR-05 | Secure authentication and role-based access | FR-UM-01 to FR-UM-04 | Register, Login |  |
| 6 | BR-06 | System integrates with SIS, AD, and Turnitin | FR-ES-01, FR-UM-02, FR-AA-03 | Authentication, Sync Students, Check Plagiarism |  |
| 7 | BR-07 | System is mobile-friendly and accessible | FR-CD-04, FR-UM-01 | All Student & Faculty Interfaces |  |
| 8 | BR-08 | |  | | --- | |  |  |  | | --- | | Admin staff can generate compliance and audit reports | | FR-RP-01 to FR-RP-04 | Generate Reports, Monitor Compliance |  |