Core Features:

These are expected in any top-class eLMS and give us a solid foundation:

- 1. Authentication & Role Management: Separate student, teacher, and admin dashboards.
- 2. Course Management: Teachers can upload course outlines, materials, assignments, quizzes.
- 3. Assignment & Quiz System: With deadlines, automated grading (MCQ, short answers), plagiarism check.
- 4. Progress Tracking: Students can see grades, completed modules, attendance.
- 5. Content Library: Secure storage for notes, slides, recorded lectures.
- 6. Mobile Responsiveness: Since many students will access via phones.
- 7. Notifications & Reminders: Deadlines, events, class updates.

Advanced Features (Unique Selling Points):

These will make ourLMS stand out from standard Moodle/Google Classroom:

- 1. Al-Powered Features
 - a. Smart tutoring assistant (explain difficult topics in simpler terms).
 - b. Al-generated quizzes from course content.
 - c. Al-powered question-answering based on uploaded course materials.
 - d. Personalized study plan generation.

2. Automated Communication

- a. Telegram/Discord/WhatsApp API integration for class groups.
- b. Smart announcements → automatically push important updates to all communication channels.
- 3. Counselling & Meeting System (your idea is brilliant here!)
 - a. Al grouping of similar student problems before faculty sees them.
 - b. "One-click meeting launch" with auto-invitations.
 - c. Post-meeting Al-generated summary notes for students.

4. Gamification

- a. Point-based unlock system (e.g., unlocking past papers/solutions with earned points).
- b. Badges for completing modules, helping peers, scoring high.

5. Knowledge Hub

- a. Question bank (by year/trimester/topic).
- b. Student-contributed notes with voting/ranking system.
- c. Optional marketplace for paid resources.

6. Scheduling & Productivity Tools

- a. Auto-generated class + exam routines from outline.
- b. Google Calendar + Outlook sync.
- c. Smart reminders (e.g., "You have a quiz tomorrow on Topic X. Review these 3 key slides.").

7. Extra Utilities

- a. Built-in dictionary (online + offline).
- b. Multilingual support.
- c. Secure personal file storage for assignments, docs, transcripts.

Features to Reduce Workload (Students & Teachers):

- 1. For Students
 - a. Auto-generated study plans based on syllabus and deadlines.
 - b. Al summarization of lectures and notes.
 - c. One-click calendar sync with all classes & exams.
 - d. Peer-to-peer help desk (volunteer mentors + Al assistant).
 - e. Auto-notes from recorded lectures (speech-to-text + summary).

2. For Teachers

- a. Al that clusters student questions → reduces repetitive Q&A.
- b. Automatic quiz generation from lecture notes.
- c. Auto-grading (MCQs, short answers with model answer matching).
- d. Attendance tracking (QR code or auto check-in via app).
- e. Al-generated feedback summaries for students.