

AoK AI-Tutoring Framework

Professor Desktop App Manual

Course Creation, AI Co-Professor & Publishing Guide


Version 4.0 | June 2026

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1. Introduction

Welcome to the Professor side of the AoK AI-Tutoring desktop app. This application lets you create, organise, and publish engineering courses that students access through their Student Workspace.

Your key tool is the **AI Co-Professor Agent** — an autonomous AI assistant that can discuss pedagogy, plan course structure, create nodes, absorb your source materials, generate lecture notes and quizzes, and compile semantic summaries of your entire course. It understands your full curriculum and acts as an intelligent collaborator — and every action it proposes requires your approval.

New in Version 4: a full records and profile suite — **My Profile Details** (your public identity card with a photo), **My Profile** (the transparent home of what the Co-Professor has learned about your teaching style), **My Record** (your complete professional dossier), a **Professor Directory**, a **Student Roster** with a six-tab record for every student including their AI assessment reports, and an  **Course Info** screen with academic details and access control. Saving is now automatic — the app autosaves your authoring state every 30 seconds. Importing also gained a conversational path: hand your materials to the Co-Professor and approve its proposed structure.

2. The Login Portal

Professor and student access share a single portal. Use the Role Toggle to switch between Student and Professor modes before signing in.

2.1 Signing In as a Professor

1. Launch the application.
2. Click **Professor** in the role toggle at the top of the login card. The tagline changes to "Course authoring & management portal".
3. Confirm the **Sign In** tab is active.
4. Enter your professor username and password.
5. Click **Sign In**.

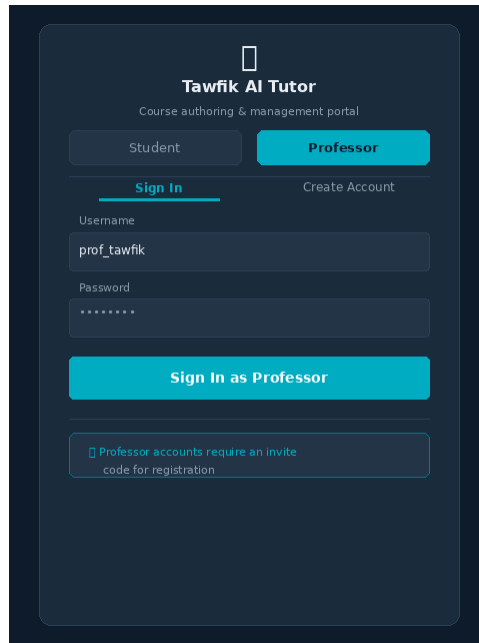


Figure 1: Login portal — Professor role selected

💡 If your account is not cached locally, the system automatically checks the cloud and stores your credentials for future logins.

2.2 Registering a New Professor Account

Professor accounts are a controlled group — registration requires an invite code issued by the system administrator.

1. Select **Professor** in the role toggle.
2. Click the **Create Account** tab.
3. Enter a username, password, and email address.
4. Enter the invite code in the **Invite Code** field.
5. Click **Register**. Your account is created immediately — no email verification step.

⚠️ Keep your invite code confidential. Without it, no new professor accounts can be created.

2.3 The Professor Selection Screen

After a successful login, a Professor Selection Screen appears before the Creator Interface launches. It lets you confirm or set the **Courses Workspace Folder** — the parent directory on your computer that contains all your course sub-folders.

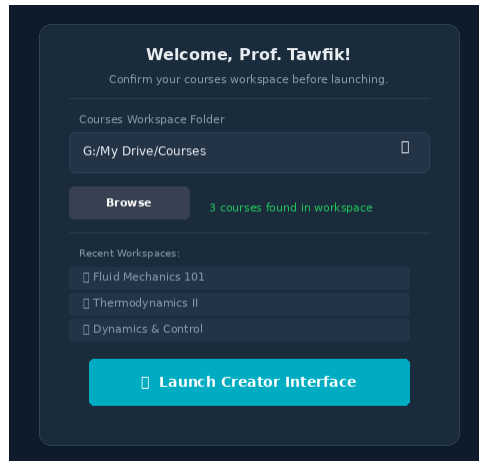



Figure 2: Professor Selection Screen — confirm your workspace before launching

1. If the workspace path shown is correct, click **Launch Creator Interface**.
2. If you need to change it, click **Browse** and select the correct parent folder, then launch.

 The workspace path is saved to your profile automatically. On your next login it will already be filled in.

3. The Creator Interface

The Creator Interface consists of three panels with a toolbar across the top. Your professor username is displayed in the title bar.

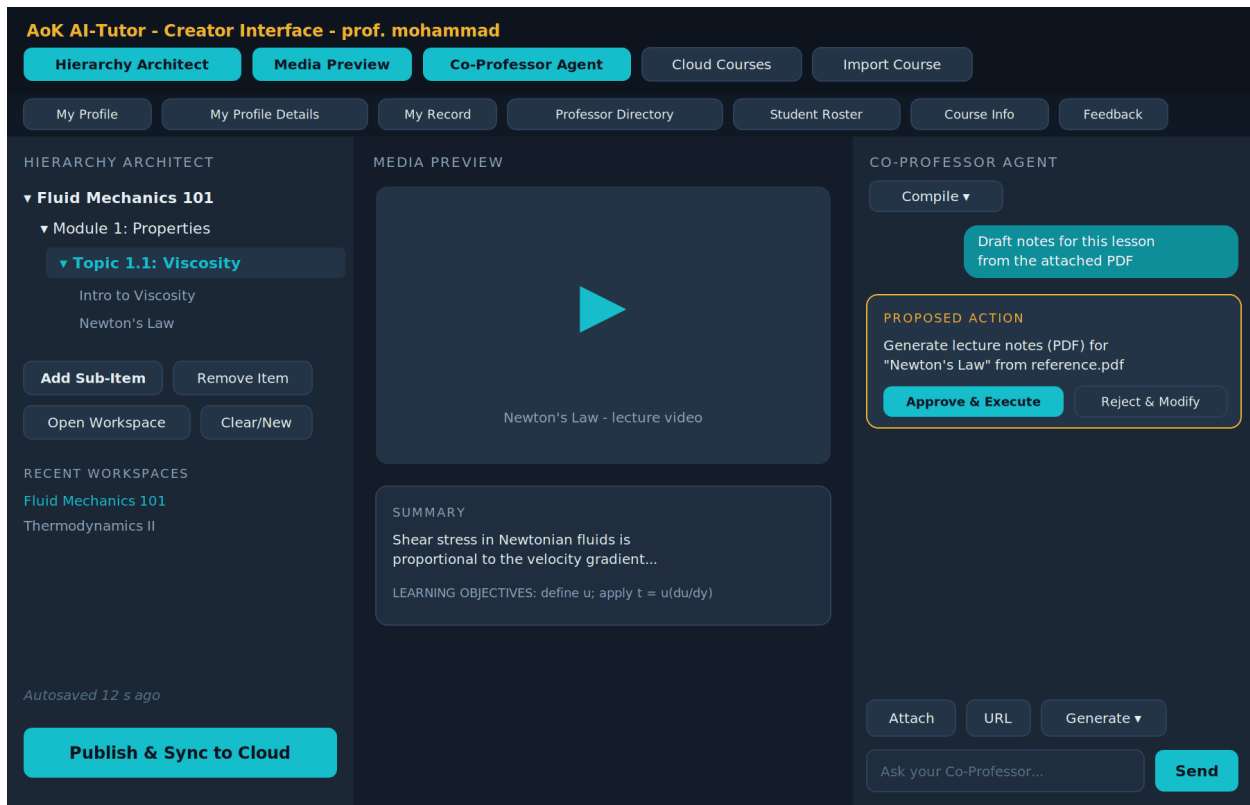


Figure 3: The Creator Interface — Hierarchy Architect (left), Media Preview (centre), Co-Professor Agent (right)

- **Panel toggles** — 👁 Hierarchy Architect, 👁 Media Preview, 👁 Co-Professor Agent: press to show, release to hide each panel.
- ☁ **Cloud Courses** — browse and download published courses (Chapter 9).
- 📁 **Import Course** — open the Import Wizard (Chapter 6).
- 👤 **My Profile** / 📝 **My Profile Details** / 📁 **My Record** — your persona, identity, and dossier (Chapter 11).
- 📖 **Professor Directory** / 👥 **Student Roster** — colleagues and students (Chapters 10–11).
- ⓘ **Course Info** — the open course's details and access policy (Chapter 8).
- 📣 **Publish to Students** / 🚫 **Unpublish** / 🗑 **Delete from Cloud** — manage the published copy of a course.
- 📝 **Feedback** — send comments to the AoK team.

Saving is automatic. The app autosaves your authoring state every 30 seconds — there is no Save button to remember. Use **Save to Different Location** (bottom of the tree panel) only when you want a copy elsewhere. Recent workspaces are listed at the bottom of the Hierarchy Architect — double-click any entry to reopen it.

4. Building Course Structure

Courses follow a strict four-level hierarchy: **Course** → **Module** → **Topic** → **Lesson**. Lessons are the leaf nodes where content is attached.

4.1 Creating a Course and Adding Nodes

1. Right-click on empty space in the Hierarchy Architect and select **Create New Course**, then enter the course name.
2. Click a parent item and click **Add Sub-Item** (or right-click → **Add Child**). The level — Module, Topic, or Lesson — is inferred from the parent.
3. Double-click any item to rename it in place.

💡 Lessons are leaf nodes — you cannot add children to a Lesson. Content is attached to Lessons via the right-click menu.

4.2 The Context Menu

Right-clicking a node shows everything you can do with it:

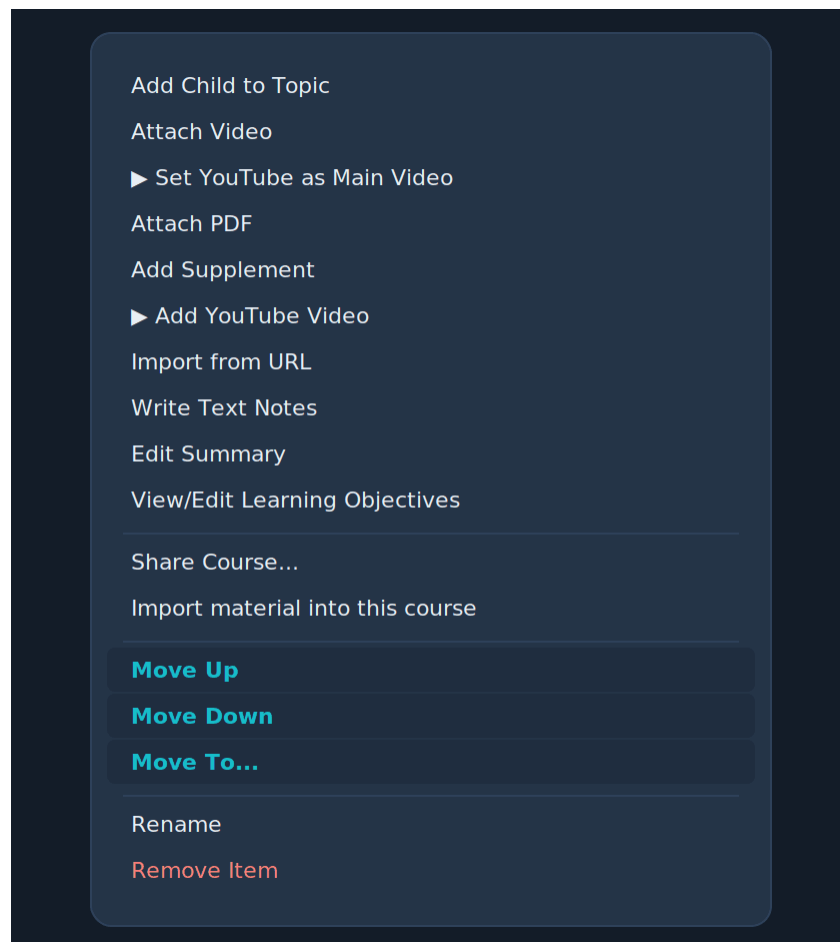







Figure 4: The right-click context menu — content, AI metadata, and structure actions

- **Attach Video / Attach PDF** — the lesson's main content (local files).
- **▶ Set YouTube as Main Video / ▶ Add YouTube Video** — use YouTube links directly, as the main video or as a supplement.
- **Add Supplement** — attach additional PDFs, videos, or images.

- **Import from URL** — pull the text of a public web page into the lesson.
-  **Write Text Notes** — type or paste lesson notes directly.
-  **Edit Summary** /  **View/Edit Learning Objectives** — review and adjust the AI-generated lesson metadata by hand.
-  **Share Course...** (Course node) — share with colleagues (Chapter 9).
-  **Import material into this course** (Course node) — open the Import Wizard aimed at this course.
- **Move Up / Move Down / Move To...** — restructure (next section).
- **Rename / Remove Item** — rename in place, or remove the node and all children.

After attaching, sub-items appear under the Lesson with type icons. Click any asset to preview it in the Media Preview panel.

4.3 Reordering and Reparenting

Move a node among its siblings with **Move Up / Move Down**. To relocate a node elsewhere, choose **Move To...**:

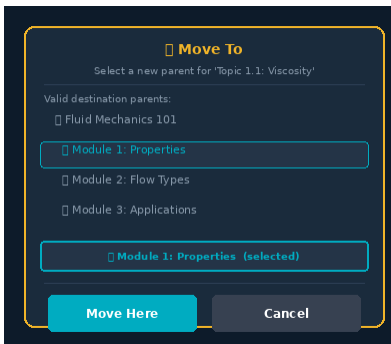




Figure 5: Move To dialog — select a compatible new parent

1. Right-click the node and select **Move To...**
2. The dialog shows all valid destination parents — only compatible levels appear.
3. Select the destination and click **Move Here**. The tree refreshes immediately.

 Valid parents are filtered by hierarchy level: a Lesson can only move under a Topic; a Topic under a Module; a Module under a Course.

 Reordering uses a stable sort order in the database — it will not affect lesson content, student progress, or AI summaries.

5. The Co-Professor Agent

The Co-Professor is your most powerful tool for course creation. It understands your entire course structure, discusses pedagogy and content design, and takes direct actions on your course — always with your approval.



5.1 Conversation

Type anything in the Co-Professor panel:

- "What topics should I cover for fluid dynamics?" — curriculum design.
- "How should I structure Module 2?" — pedagogical approaches.
- "Review my current course outline." — analysis and suggestions.

The agent remembers the full conversation, so multi-turn discussions feel natural. It works quietly — narrating only what matters — and stays strictly honest about what it did and did not manage to do.

5.2 Proposals — Approve & Execute

When you ask for something that changes the course, the agent first shows the plan in the **Action Panel** below the chat. Review the proposed nodes or content, then click  **Approve & Execute** to apply it, or  **Reject & Modify** to ask for changes. Normal conversation never triggers changes.

5.3 Bring Your Materials

Hand the agent your source materials and let it work with them:

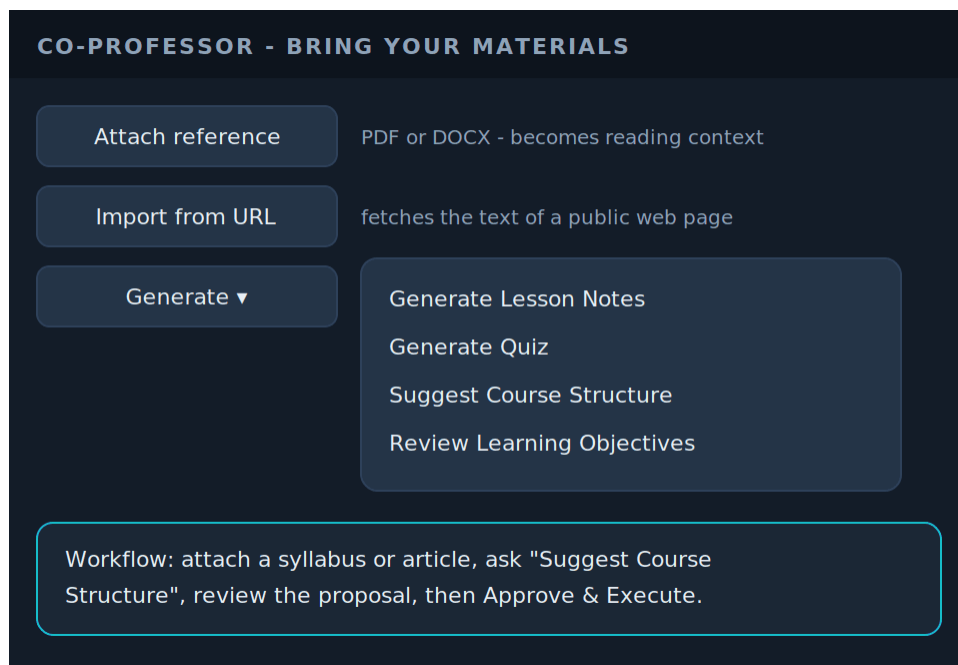




Figure 6: The source buttons — attach a reference, import a URL, then generate

-  **Attach** — a PDF or DOCX (a syllabus, a textbook chapter, your old notes) becomes reading context for the agent.
-  **URL** — fetches the text of a public web page.
- A very large source is summarised automatically so the agent can still use it.

5.4 The ✨ Generate Menu

One-click generation actions, each producing a proposal for your approval:

- 📄 **Generate Lesson Notes** — drafts full lecture notes for a lesson, saves them as a PDF in the course's generated_notes folder, and links them to the lesson automatically.
- 📝 **Generate Quiz** — drafts practice questions for the lesson.
- 🌿 **Suggest Course Structure** — proposes a full hierarchy from your attached materials: attach a syllabus, click this, review, approve.
- 🔍 **Review Learning Objectives** — audits and improves the focused node's learning objectives.

When you finish a multi-step composition that worked well, the agent may offer to **save it as a skill** — a remembered recipe it can reuse next time. It always asks before saving.

5.5 It Learns How You Teach

As you work together, the Co-Professor builds a picture of your teaching style and uses it to tailor its proposals. Everything it has learned is visible and correctable in 👤 **My Profile** (Chapter 11) — nothing is hidden from you.

6. The Import Wizard

The 📁 **Import Course** button opens the Import Wizard — a guided tool that builds course structure and imports content from several sources in one pass. (For a conversational alternative, the Co-Professor's 📎 + 🌿 **Suggest Course Structure** achieves the same goal — use whichever fits the material.)

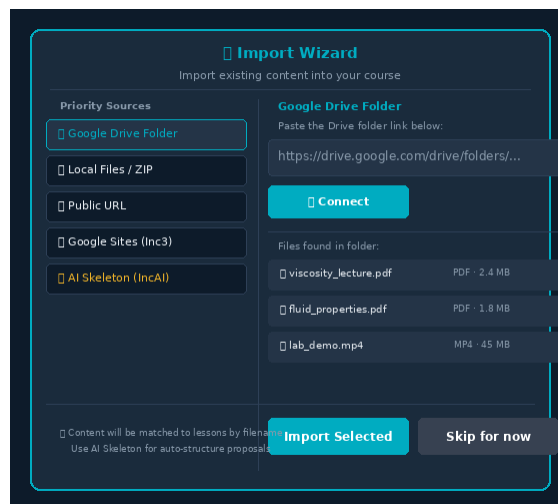


Figure 7: Import Wizard — choose your content source from the left panel

1. Click 📁 **Import Course** in the toolbar (or right-click a Course node → 📁 **Import material into this course**).
2. Choose your source and follow its steps.
3. Review the proposed file-to-lesson mapping in the right panel — the wizard names YouTube videos by their real titles and matches files to lessons intelligently.



4. Click **Import** to create nodes and link files.
 - **Google Drive Folder** — paste a folder link; sub-folders map to the hierarchy.
 - **Local Files / ZIP Archive** — select files, a folder, or a ZIP from your computer.
 - **Public URL** — fetch a public web page.
 - **Google Sites** — ingest an entire Google Sites course site (a desktop-app speciality, using its embedded browser engine).
 - **AI Skeleton**  — after importing any source, let the AI propose an intelligent course structure for your approval:





Figure 8: AI Skeleton — review the proposed course structure before approving



7. Compile, Analyze & Publish

7.1 Compiling


 Always Compile before Publishing. Without compilation, the student AI Tutor only has access to individual lesson notes — not the full course context.

The **Compile**  menu sits in the Co-Professor panel header:

1. Click  **Compile**. The system scans all lessons, reads all PDFs and notes, and performs bottom-up summarisation: Lessons → Topics → Modules → Course.
2. Progress is reported as it works; results are saved to the course's AI context.
3. When complete, the course is ready for publishing.

Smart caching reuses unchanged summaries — only modified content is reprocessed. 
Force Recompile deliberately rebuilds everything from scratch.  **Analyze Course** (same menu) gives you an AI quality review of the whole course — coverage, balance, and gaps — without changing anything.

7.2 Publishing

1. Click  **Publish & Sync to Cloud** (teal button at the bottom of the Hierarchy Architect).
2. A progress dialog opens with a live log of every file being synced.

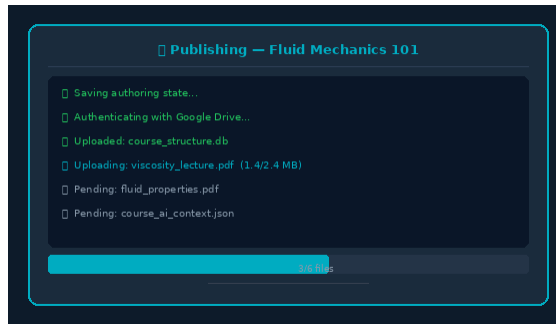






Figure 9: Publishing progress dialog with live upload log

1. Wait for the confirmation message, then click **Close**.
2. Students can now access the updated course.

From the toolbar you can also  **Publish to Students** (make the published copy visible),  **Unpublish** (hide it without deleting), and  **Delete from Cloud** (remove the published copy entirely).

8. Course Info & Access Control

Every course has an  **Course Info** screen — open it from the toolbar (or the course's right-click menu). It is the course's public face and its access policy in one place; students see a read-only version.

- **Academic details** — cognitive level, related topics, and descriptive text.
- **Related topics (AI)** — click **Generate AI topics** and the system proposes related subjects: pointers to other courses on the platform that teach them (linked only for people who may access those courses) plus external suggestions. You can also keep your own manual list.
- **Organization** — which institution the course belongs to.
- **Access** — who may see the course: everyone, or a restricted list. With a restricted list, only the students you name (or your institution's students, depending on the mode) can find and open the course.

9. Cloud Courses & Sharing

9.1 The Cloud Course Browser

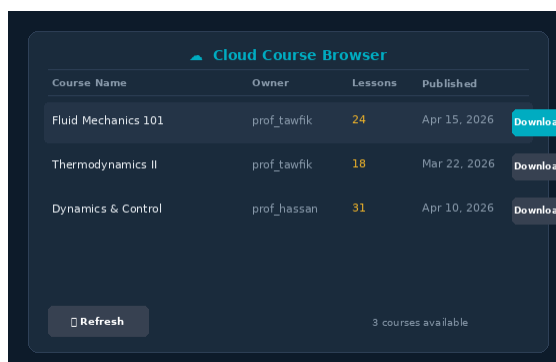




Figure 10: Cloud Course Browser — browse and download published courses

1. Click  **Cloud Courses** in the toolbar. The browser fetches the latest course registry.
2. Click a course row, then **Download to Workspace**. A progress dialog shows status.
3. The course appears in your Hierarchy Architect on the next Open Workspace.

 If a course is already downloaded, re-download to get the latest version published by its owner.

9.2 Sharing With Colleagues

Share any course you own — shared courses appear in the recipient's Cloud Course Browser:

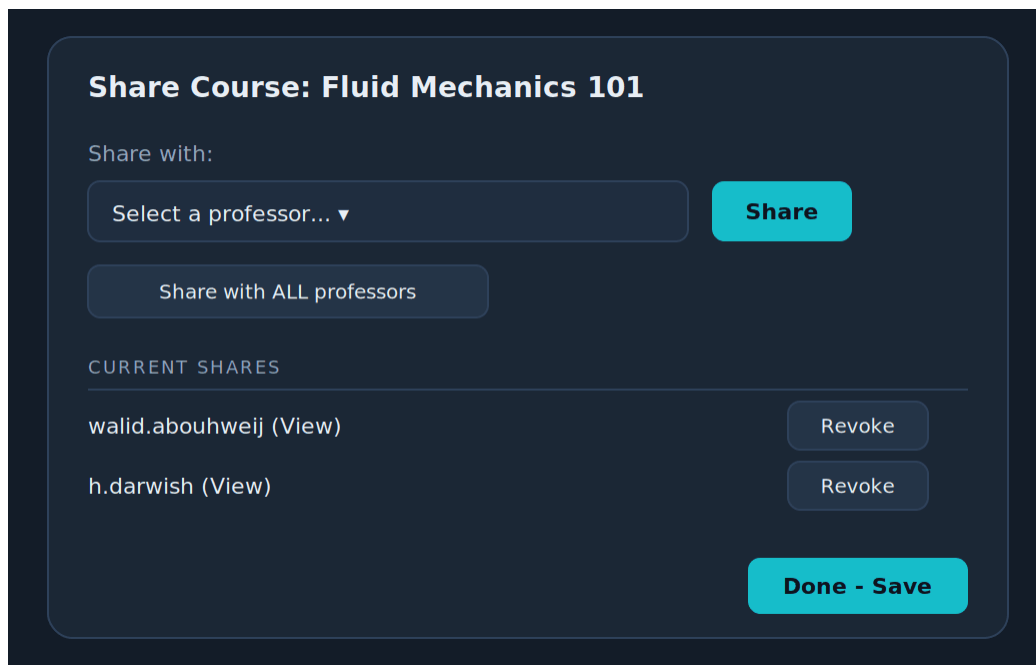





Figure 11: Share Course dialog — pick a professor, or share with everyone at once

1. Right-click the Course node and select  **Share Course...**
2. Pick the colleague from the professor list — no typing usernames — or use **Share with ALL professors** to share platform-wide in one click.
3. Click **Done — Save Changes** to apply. Use **Revoke** next to any name to withdraw access.

10. Your Students

10.1 The Student Roster

Click  **Student Roster** in the toolbar to see everyone studying your courses, organised per course: who they are, when they first and last opened the course, and how often. A  Refresh button rebuilds the list on demand.


10.2 Student Records

Click any student in the roster to open their full record — six tabs covering everything the platform knows:

Lesson	Score	Bloom level	Saved
Newton's Law	84 / 100	Applying	2026-06-08
Intro Viscosity	91 / 100	Analyzing	2026-06-05
Pressure Basics	72 / 100	Understanding	2026-06-02

Figure 12: A student record — the Assessment tab lists every saved AI assessment report

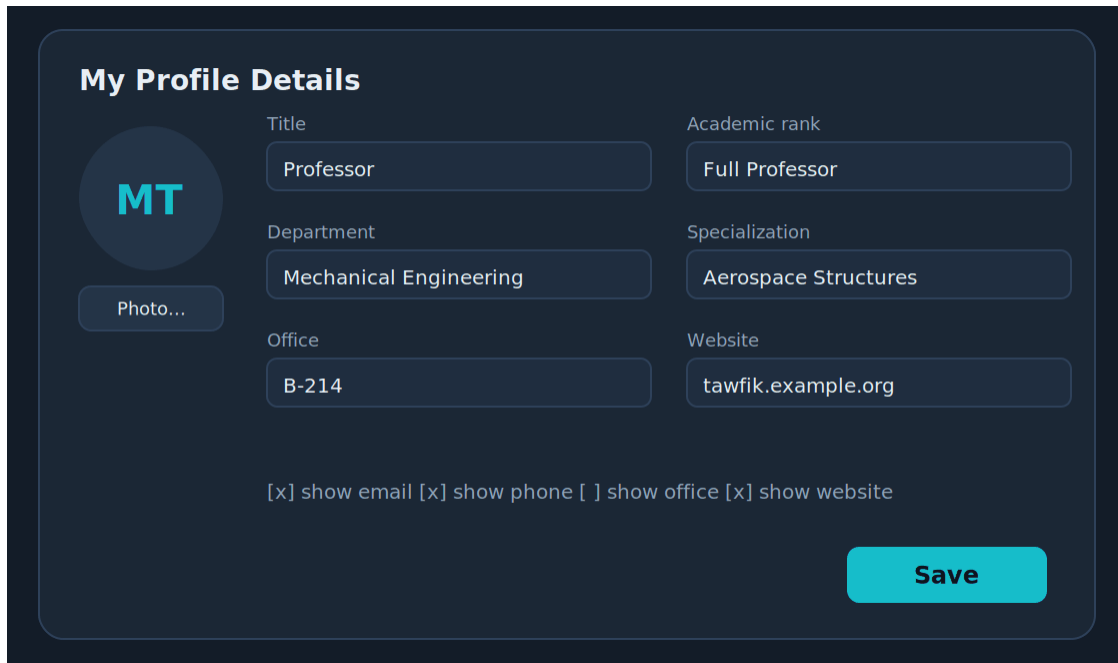
- **Profile** — who they are.
- **AI** — how they work with the AI tutor.
- **Progress** — XP, level, streak, and Bloom progression.
- **Courses** — what they study and how far they have come.
- **Assessment** — every assessment report the student saved, with scores and Bloom levels. This is your window into how each student is actually doing.
- **Notes** — your private per-course notes about the student. Students never see these.

The record refreshes automatically in the background; click  **Synchronize Now** to rebuild it on the spot.

11. Your Profile, Persona & Record

Three toolbar buttons cover your professional presence on the platform:

11.1 My Profile Details — Your Public Card



My Profile Details

Photo...

Title: Professor

Academic rank: Full Professor

Department: Mechanical Engineering

Specialization: Aerospace Structures

Office: B-214

Website: tawfik.example.org

[x] show email [x] show phone [] show office [x] show website

Save


Figure 13: My Profile Details — identity, photo, and visibility

Edit your public identity: upload a **photo**, and fill in your title, academic rank, department, specialization, phone, office, secondary email, and website, plus a short bio and a longer about-me text. Four **show/hide checkboxes** control which contact details other people can see.

11.2 My Profile — How the Co-Professor Sees You

The transparent home of everything the Co-Professor has learned about your teaching style:

- **Its summary** — a short written portrait, with a Refresh option.
- **Observations** — individual things it noticed, with a **Mark as incorrect** option on each; your own added notes (deletable); and admin notes (read-only).
- **Add your own** — tell it something directly.
- **About me** — four free-text fields the agent always respects: your teaching philosophy, expertise areas, preferences and style, and things to avoid.

 The better this reflects you, the better the Co-Professor's proposals fit your style. It is worth five minutes.

11.3 My Record — Your Dossier

Your complete professional record as the platform sees it — identity, courses, activity, and persona in one read-only view. This is what an administrator sees about you, so it is worth a look.

11.4 📖 Professor Directory

Browse your colleagues on the platform — name, title, and department. Click any row to open that professor's public card. Only the details each professor chose to show are visible.



12. Media Preview


The centre panel previews any asset in your course instantly:

- Local video (MP4, MKV, AVI) — embedded media player.
- YouTube links — embedded YouTube player.
- PDF files — embedded PDF viewer.
- Images — displayed directly.
- Google Docs / Slides / Sheets — embedded Google viewer.
- Office documents (DOCX, PPTX, XLSX) and ODT/ODP/ODS — converted to an HTML preview automatically.

13. Recommended Workflow

Step	Action	Description
1	Log in	Select Professor role, sign in, confirm your workspace folder.
2	Plan	Discuss course goals with the Co-Professor; attach your syllabus with 📎.
3	Create / Import	Build the hierarchy by hand, use the 🍰 Import Wizard, or ask for 🌿 Suggest Course Structure.
4	Refine structure	Reorder with Move Up/Down and relocate with Move To...
5	Attach content	Videos, PDFs, YouTube links, supplements, and text notes.
6	Generate notes & quizzes	Use the ✨ menu for empty lessons; approve each proposal.
7	Preview	Click through the tree and verify everything in the Media Preview.
8	Set Course Info	Fill the academic details and

		choose who may access the course.
9	Compile	Compile ▼→  Compile so the student AI Tutor has full context.
10	Publish & share	 Publish & Sync to Cloud; share with colleagues if needed.

 You can iterate on any step at any time. Autosave protects your work every 30 seconds; always Compile before your final Publish.

14. Troubleshooting & FAQ

Q: Where is the Save button?

A: Saving is automatic — the app autosaves your authoring state every 30 seconds, and again before publishing. Use Save to Different Location only when you want a copy somewhere else.


Q: The Import Wizard fails to connect to Google Drive.

A: Make sure the folder link is set to "Anyone with the link can view" in Google Drive sharing settings, and check your internet connection.


Q: The Co-Professor is slow to respond.

A: It uses a deep reasoning AI model. Complex structural requests may take 30–90 seconds. Leave the window open while it is thinking.

Q: Students say they cannot see my changes.

A: Ensure you clicked  Publish & Sync to Cloud after your last edits. Students sync when they open the course — they may need to close and reopen it.


Q: Some students cannot find my course at all.

A: Check the Access section of  Course Info — the course may be restricted to a list or to your institution's students.

Q: Can I undo a Move To... operation?

A: Use Move To... again to move the node back to its original parent.

Q: Compiling seems to take a long time.

A: First-time compilation of a large course can take several minutes. Smart caching speeds up later compiles significantly;  Force Recompile is deliberately the slowest path.

Q: Where do I see a student's assessment results?

A: Click 👤 Student Roster, open the student, then the Assessment tab. Every report the student saved is listed with its score and Bloom level.

Q: The Co-Professor noted something about my teaching style that is wrong.

A: Open 👤 My Profile, find the observation, and mark it as incorrect. It stops influencing the agent; you can restore it later if you change your mind.

Q: The media preview is blank for a video I attached.

A: Check that the file format is supported (MP4, MKV, AVI) and that the file still exists at its location. For YouTube links, check your internet connection.