

An AI assistant that keeps every learner on track.

UNIRAZAK (Universiti Tun Abdul Razak) uses an Artificial Intelligence Assistant LTI application to help the institution plan and execute an effective communication strategy — assisting students to complete their course modules on time and personalizing their learning experience.

CLIENT	REGION	ENGAGEMENT	PLATFORM
UNIRAZAK	Malaysia	University · AI assistant & dashboard LTI	LTI 1.3

UNIRAZAK.

UNIRAZAK (Universiti Tun Abdul Razak) uses an Artificial Intelligence Assistant LTI application to help the institution plan and execute an effective communication strategy — assisting students to complete their course modules on time and personalizing their learning experience.

OUTCOMES AT A GLANCE

On-time

module completion

No-code

workflow automation

4 channels

WhatsApp · email · push · chat

AI

assistant & live chat

THE BRIEF

The challenge & our solution.

THE CHALLENGE

The university needed to keep students on track to finish their modules on time, but had no unified way to see learner behavior, automate outreach, or personalize support at scale across its courses.

THE SOLUTION

We built an AI Assistant and analytics dashboard, embedded via LTI, with admin insights, a visual workflow builder automating outreach across WhatsApp, email, push and live chat, deep progress and attendance analytics, ratings, and an AI chatbot with live-chat support.

How we delivered it.

01

Insights dashboard

Built an admin dashboard that surfaces user-behavior patterns across the organization, with KPIs, ad-hoc data views and scheduled reports.

02

Workflow automation

Created a visual, no-code workflow builder with manual and rule-based triggers that reach students over WhatsApp, email, push and live chat.

03

Progress analytics

Delivered course, attendance, assessment, schedule, payment and logging analytics — all the way down to each individual learner.

04

AI assistant & support

Added Teval, learner and lecturer ratings, CSV bulk updates, and an AI chatbot backed by live chat and a help center.

TECHNOLOGY STACK

• LTI 1.3

• Canvas LMS

• Ruby on Rails

• Workflow engine

• AI chatbot

• WhatsApp / Email / Push

INSIDE THE BUILD

The complete walkthrough.

18 screens walk through the build end to end — the following pages cover each one.



Admin dashboard

Visibility of user-behavior patterns across the organization, with KPIs, ad-hoc data views and scheduled reports on insights and updates.

The screenshot shows the 'Learner's Analytic Dashboard' for 'Universiti Tun Abdul Razak > ALIA'. The left sidebar contains navigation links for Account, Admin, Dashboard, Courses, Calendar, Inbox, History, Commons, and Help. The main content area is divided into three sections: Dashboards, Workflows, and CSV Uploads. The 'Dashboards' section is expanded, showing a 'Main' dashboard with 'User Login Stats'. The stats show a total of 10472 users and a 23.68% increase over the last 30 days. Below the stats, there is a list of users with their names and email addresses: Jacob ja prince Y, James Jeswin G, Benito Sam E, Thanga Denesh V, and Saravana Kumar M. Each user entry has a right arrow icon.

Workflow builder

A visual tool that lets admins automate routine functions by creating workflows that take a specific action.

The screenshot shows the 'Workflow Builder' interface. The left sidebar is the same as the previous screenshot. The main content area is titled 'Workflow Builder' and includes a 'Home / Create Workflow' link. The interface is divided into three columns: 'Select Term', 'Account', and 'Course'. Below these, there are sections for 'Select Workflow Type' (with 'All types' selected), 'Select on or before' (with 'Select when' selected), and 'Select day' (with 'Select day' selected). There are three checkboxes: 'Send email' (checked), 'Connect chatbot' (checked), and 'Send whatsapp' (checked). Each checkbox has a corresponding text input field. At the bottom, there is a 'Submit' button and a 'Manual Trigger' button. A 'Refresh' button is also present at the bottom right.

Workflow manual trigger

A manual trigger fired by a user while creating or editing a record, configured through a workflow rule — for outreach that needs a human decision.

The screenshot shows the UROX Learner's Analytic Dashboard for Universiti Tun Abdul Razak > ALIA. The left sidebar contains navigation links for Account, Admin, Dashboard, Courses, Calendar, Inbox, History, Commons, and Help. The main content area is titled 'Dashboards' and lists various analytics categories. The 'Manual Trigger' section is active, displaying a table of triggers.

TRIGGER NAME	WHEN	DAYS	ACTION
New course is offered	On Time	1 days	Trigger Edit Delete
Graded assessment due	After	1 days	Trigger Edit Delete
Graded assessment due	After	1 days	Trigger Edit Delete
Final Exam is due	On Time	1 days	Trigger Edit Delete
Class Schedule is due	On Time	1 days	Trigger Edit Delete
Graded assessment due	Before	4 days	Trigger Edit Delete
Graded assessment due	On Time	1 days	Trigger Edit Delete
Graded assessment due	After	2 days	Trigger Edit Delete
Final Exam is due	On Time	1 days	Trigger Edit Delete
New course is registered	On Time	1 days	Trigger Edit Delete
New course is offered	Before	2 days	Trigger Edit Delete

Workflow details

Each workflow is customized to reach students via WhatsApp, email, push notification, or by opening a live chat with an administrator.

The screenshot shows the UROX Learner's Analytic Dashboard for Universiti Tun Abdul Razak > ALIA. The left sidebar contains navigation links for Account, Admin, Dashboard, Courses, Calendar, Inbox, History, Commons, and Help. The main content area is titled 'Dashboards' and lists various analytics categories. The 'Workflow Builder' section is active, displaying a form for configuring a workflow.

Workflow Builder
Home / Edit Workflow

Select Term: TEST-Default Account: ALIA Course: THE ART AND CRAFT OF REMOTE TEACHING

Select Workflow Type: New course is offered Select on or before: On Time Select day: 1

☐ Send email ☐ Consolidate email

We have sent the invitation for {{course_name}} course to your email. It is extremely important that you accept this invitation as soon as possible. Please check your mailbox or login to UROX and click on Accept button to join.

☒ Connect chatbot

We have sent the invitation for {{course_name}} course to your email. It's extremely important that you accept this invitation as soon as possible. Please check your mailbox or login to UROX and click on Accept button to join.

☒ Send whatsapp

Hello {{student_name}},

We have sent the invitation for {{course_name}} course to your email. It's extremely important that you accept this invitation as soon as possible. Please check your mailbox or login to UROX and click on Accept button to join. Link: {{url}}

Update Back

Resource view & participations

Helps instructors view overall participation and performance, and makes sure each student knows their task matters.

Universiti Tun Abdul Razak > ALIA > Learner's Analytic Dashboard

Resource Views and Participations
Home / Resource Views and Participations

Select Term: **TEST-Default** Account: **ALIA** **Submit**

Term Name: TEST-Default
Term Start Date: 01-Oct-2021
Term End Date: 31-Dec-2022

OVERALL PAGE VIEWS	OVERALL PARTICIPATIONS	TOTAL TIME SPENT(H:M)
202	32	00:01

Student progress

Analyze the progress a student has made in a particular course — module by module, with completion and on-time rates.

Universiti Tun Abdul Razak > ALIA > Learner's Analytic Dashboard

Course Name
SYSTEM VALIDATION

Type student name **Search**

STUDENT NAME	PROGRESS	ACTION
Benito	10	View
Kumar	28	View
Sundar Raj	0	View
Uma Raj	0	View
Vinistan Raj	0	View
Wisley	0	View
Denesh	55	View
Jacob	41	View
Jacob Jaya prince Y	5	View
Firdaus Fitri	15	View
Azlin Shah Zainal Abidin	0	View

All course progress

Analyze a student's progress across every course they are enrolled in, side by side.

Universiti Tun Abdul Razak > ALIA > Learner's Analytic Dashboard

All Courses Progress
Home / All Course Status

User Name: Jacob

COURSE NAME	PROGRESS	ACTION
THE ART AND CRAFT OF REMOTE TEACHING	67	View
SYSTEM VALIDATION	41	View

Course progress & completion

On-time enrollments, late and missing submissions across all courses under a term and sub-account.

Universiti Tun Abdul Razak > ALIA > Learner's Analytic Dashboard

Progress and Completion Status
Home / Progress and Completion

School Name: ALIA
Start Date: 01-Oct-2021
End Date: 31-Dec-2022

[Filter](#)

COURSE DETAILS		ENROLLMENT CONFIRMATION				ASSESSMENT SUBMISSION	
COURSE NAME	SIS ID	ENROLLMENT	CONFIRMED ENROLLMENT	CONFIRMED ENROLLMENT (%)	UNCONFIRMED ENROLLMENT (%)	ALL ASSESSMENT SUBMITTED ON TIME	ALL ASSESSMENT SUBMITTED ON TIME (%)
SYSTEM VALIDATION	5692-SV	9	9	100.0 %	0.0 %	17	18.89 %
DATA STRUCTURES AND ALGORITHMS	atc01	9	7	77.78 %	22.23 %	0	0 %
THE ART AND CRAFT OF REMOTE TEACHING	5691	7	6	85.72 %	14.29 %	2	11.12 %
Live Event Test	LVT6287	1	1	100.0 %	0.0 %	3	60.0 %

Student progress report

The full details of a student in a course — grades, attendance, activity and recent assessments in one place.

The screenshot shows the 'Student Progress Report' for a user named Jacob in the course 'THE ART AND CRAFT OF REMOTE TEACHING'. The interface includes a sidebar with navigation options like Account, Admin, Dashboard, Courses, Calendar, Inbox, History, Commons, and Help. The main content area displays a table of module items with columns for Status, Due Date, Completed Date, No of Views, Time Spent, Participated Count, and Score.

MODULE ITEMS	STATUS	DUE DATE	COMPLETED DATE	NO OF VIEWS	TIME SPENT(M-S)	PARTICIPATED COUNT	SCORE
QUIZ - WEEK - 1	COMPLETED	09-OCT-2021	16-OCT-2021	9	00:00	2	80.0 %
OVERVIEW	COMPLETED			1	00:00	0	0 %
LETS INTRODUCE YOURSELF	COMPLETED			1	00:00	0	0 %
SAMPLE_FILE.PDF	COMPLETED			1	00:00	0	0 %
BOOKS	COMPLETED			1	00:00	0	0 %
LEARNER'S ANALYTIC DASHBOARD	UNCOMPLETED			0	00:00	0	0 %
WEBINAR FEEDBACK (CLASSIC)	UNCOMPLETED			0	00:00	0	0.0 %
OVERVIEW	UNCOMPLETED			0	00:00	0	0 %
ENTRY SURVEY (CLASSIC)	COMPLETED	28-MAR-2022		3	00:00	1	0.0 %
MID TERM SURVEY (CLASSIC)	COMPLETED	28-MAR-2022		3	00:00	1	0.0 %
END OF TERM SURVEY (CLASSIC)	COMPLETED	28-MAR-2022		3	00:15	1	0.0 %

Attendance report

Attendance generated by the school — present, late and absent across the term, summarized and per session.

The screenshot shows the 'Attendance by school' report for the term 'TEST-Default' and week 'w1'. The report includes a table summarizing attendance data for the school 'ALIA'.

Status	ALIA		Total Students	%
	Student Count	%		
Attendance >= 50%	3	42.86%	3	43%
Attendance < 50%	0	0.0%	0	0%
No Attendance	4	57.14%	4	57%
Student At Risk	4	57.14%	4	57%
Enrolled Student	7	100%	7	100 %

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Assessment results

The log of marks and grades earned by each student across quizzes, assignments and exams.

uox.instructure.com/accounts/592/external_tools/1469

Universiti Tun Abdul Razak > ALIA > Learner's Analytic Dashboard

Assessment Results
Home / View by School

Select Term: TEST-Default Week From: All Week to: All Submit

Term Name: TEST-Default
Term Start Date: 01-Oct-2021
Term End Date: 31-Dec-2022

STUDENTS AND CARRY MARKS	ALIA	RATIO	TOTAL	RATIO
Active Students	17	100 %	17	100 %
71% and above	0	0.0 %	0	0.0 %
61% to 70%	0	0.0 %	0	0.0 %
51% to 60%	0	0.0 %	0	0.0 %
41% to 50%	0	0.0 %	0	0.0 %
40% and below	17	100.0 %	17	100.0 %
Student at Risk (carry mark below 40%)	17	100.0 %	17	100.0 %

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Class schedule

Schedule class times that maximize the chance for students to build workable schedules and progress toward their degree.

uox.instructure.com/courses/5692/external_tools/1471

SV > Class Schedules

Class Schedules
Home / Past

Today Upcoming Past

+ Add new schedule

DATE	TOPIC	DURATION	RECORDING LINK
07-Dec-2021	Week 1 Class	40 minutes	NA
14-Dec-2021	System Validation Course Final exam - Dec 2021	1 hrs 0 min	NA
25-Jan-2022	Chat bot Test	10 minutes	NA
23-Mar-2022	Class for ALIA demo	10 minutes	Link
25-Jan-2022	Group Chat about Chat bot	10 minutes	NA
08-Feb-2022	Chat bot Test - Final Exam	10 minutes	NA
01-Mar-2022	Final Exam Calling - Important	10 minutes	NA
01-Mar-2022	Discussion About ALIA	10 minutes	NA

Payment schedule

Schedule and notify everyone about the date and amount of each payment, with paid, due, scheduled and overdue states.

Universiti Tun Abdul Razak > ALIA > Learner's Analytic Dashboard

Payment Schedules
Home

[+ Add new schedule](#)

S.NO	FEE NAME	DUE DATE	DEFER DATE	AMOUNT	EDIT	DELETE
1	Term fee	Dec 16, 2021	-	40000.0	Edit	Delete
2	Exam Fee	Dec 20, 2021	-	5000.0	Edit	Delete
3	Tuition fee	Mar 17, 2022	-	3000.0	Edit	Delete
4	Course fee	Dec 21, 2022	Jan 31, 2022	8000.0	Edit	Delete

User & time logging

Each student's login and logout details, and the frequency of their activity over time.

Universiti Tun Abdul Razak > ALIA > Learner's Analytic Dashboard

View User Details
Home / User Logins / View User

Users Login & Logout Details

Login Sessions

LOG TYPE	DATE & TIME
login	4 Jul 2022 12:36PM
logout	4 Jul 2022 12:35PM
login	4 Jul 2022 12:30PM
login	4 Jul 2022 12:30PM
login	4 Jul 2022 12:21PM
login	27 Jun 2022 11:07AM
login	27 Jun 2022 10:01AM
logout	21 Jun 2022 13:49PM
login	21 Jun 2022 13:35PM
login	21 Jun 2022 12:34PM

Ratings

Teval, learner-satisfaction and lecturer ratings measure performance and capture survey scores per period.

Universiti Tun Abdul Razak > ALIA > Learner's Analytic Dashboard

TEVAL Ratings
Home / Teval Ratings

Select Term: Week From: Week to:

[Click here to download Sample survey export package](#)

Term Name: TEST-Default
Term Start Date: 01-Oct-2021
Term End Date: 31-Dec-2022

Survey	Ratings	ALIA
The course introductory and learning outcomes were clearly explained.	5	1
	4	0
	3	0
	2	1
	1	0
	Average	0.4
The lesson plan provides clear organization of the course.	5	1
	4	0
	3	0
	2	1
	1	0
	Average	0.4
The course materials are sufficient to support my learning experience.	5	1
	4	0
	3	0
	2	1

CSV bulk upload

Update users' information in bulk — such as phone and payment — via CSV with column mapping and validation.

Universiti Tun Abdul Razak > ALIA > Learner's Analytic Dashboard

Phone Numbers CSV Upload
Home / Phone Numbers CSV Upload

No file chosen

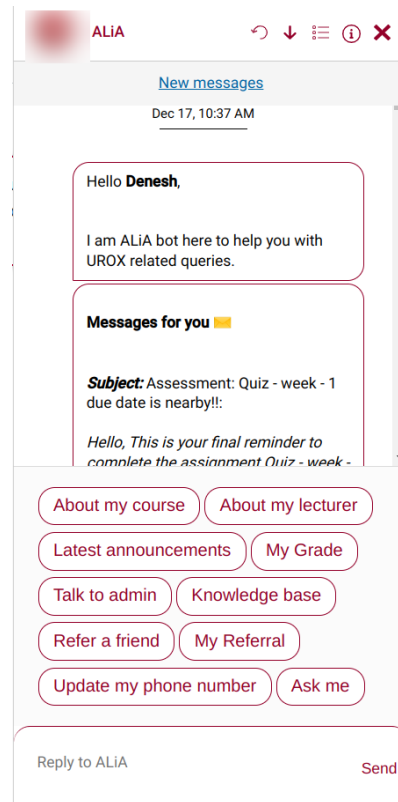
Sample csv to upload phone numbers file

Note: CSV must contain exact Student SIS ID and Phone number with country code

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AI chatbot

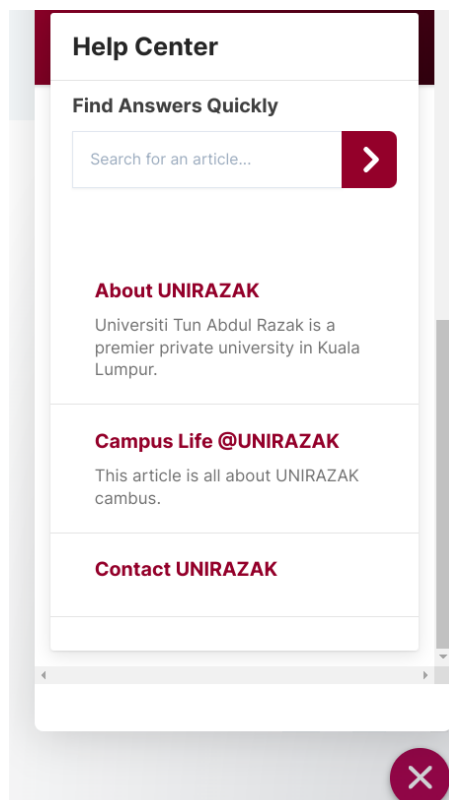
A chatbot that answers learner questions and resolves common issues instantly, in context, without a human operator.



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Live chat & help center

Live chat and the chatbot work together for high-quality support, with a help center and a live-chat admin console for the team.



Engineered for measurable impact.

A single AI assistant plans the outreach, automates it across every channel, and shows exactly which learners need help — so more students finish on time.

UNIRAZAK · AI Assistant LTI

Built and delivered by ZionStar

**On-
time**

module
completion

**No-
code**

workflow
automation

**4
channels**

WhatsApp · email ·
push · chat

AI

assistant & live
chat

Want results like these for your learners?

Tell us what you're building — we'll map the fastest path to your outcome.

[Book a consultation](#)

