
IBM HACKATHON PROJECT

TRAVEL AI AGENT

Presented By: Vaishnavi Bansode

College Name & Department : MIT Academy of Engineering (CS)

OUTLINE

- Problem Statement
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PROBLEM STATEMENT

- Navigating the college admission process is often overwhelming for students. Institutional websites are cluttered, FAQs are outdated, and staff are overloaded with repetitive inquiries. Our solution: a **College Admission Agent**, powered by **IBM Granite** and **Retrieval-Augmented Generation (RAG)**, deployed on **IBM Cloud Lite**.
- This intelligent assistant retrieves and summarizes institutional data—admission policies, eligibility criteria, fee structures, deadlines, and more. Students can ask natural questions and get real-time, accurate answers, 24/7. It simplifies admissions, enhances transparency, and transforms applicant engagement.

TECHNOLOGY USED

- **IBM Granite LLM** – for natural language understanding and response generation
- **RAG (Retrieval-Augmented Generation)** – to fetch and ground responses in real-time institutional documents
- **IBM Cloud Lite** – for serverless deployment, storage, and service orchestration
- **Prompt Lab & Agent Builder** – to design, test, and deploy the agent
- **Watson Discovery / Vector DB (optional)** – for semantic search and retrieval of structured data

WOW FACTORS

- **Natural Language Interface:** Students ask questions like "What are the hostel fees for B.Tech?" and receive exact, sourced answers.
- **Tool-Using AI:** Not just trained on fixed data—it *retrieves* updated information on demand.
- **Always Available:** No waiting, no email chains. Information is instant, consistent, and interactive.
- **Built Entirely on IBM Stack:** A showcase of how IBM Granite and Cloud Lite can solve real-world problems.

END USERS

- **Prospective students and parents** seeking transparent guidance
- **College admission departments** to reduce inquiry workload
- **Universities and education consultants** to integrate AI into their admission workflow
- **EdTech platforms** aiming to simplify institutional data access

RESULTS

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Dallas ▾

VB

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Autosaved 10:29 PM

New agent +

Deploy

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Saved agents

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From AgenticAI

🤖

College Admission Agent

Hello There! i am your college admission guide

Build

AI

Model: granite-3-3-8b-instruct ▾

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Setup ▾

Configuration ▴

Framework

LangGraph ▾

Architecture

ReAct ▾

Instructions

Advanced configuration

You are a knowledgeable and friendly virtual assistant built using watsonx.ai. Your role is to provide accurate, clear, and helpful answers to user questions by using relevant tools and information from trusted sources. Always keep your tone professional yet approachable.

Knowledge ▾

Tools ▴

Add a tool

Create custom tool

Added tools (6)

Agent preview

VB

You: 10:28 PM

What is the eligibility criteria for B.Tech Computer Engineering at MIT Academy of Engineering?

🤖

College Admission Agent 10:28 PM

To be eligible for the B.Tech Computer Engineering program at MIT Academy of Engineering, you need to meet the following criteria:

1. **Academic Qualification:** You must have completed your 10+2 examination with Physics, Chemistry, and Mathematics (PCM) subjects, scoring a minimum of 45%.

2. **Entrance Exam:** You need to qualify in either the Maharashtra Common Entrance Test (MHT-CET) or the Joint Entrance Examination (JEE).

Please note that these criteria are subject to change, so it's always a good idea to check the official MIT Academy of Engineering website or contact them directly for the most current and detailed information.

Let me fetch the latest details for you using the RAGQuery tool.

[RAGQuery]{ "input": "What is the eligibility criteria for B.Tech Computer Engineering at MIT Academy of Engineering?" }

Type something...

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RESULTS

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Saved agents

From AgenticAI

College Admission Agent

Hello There! i am your college admission guide

Build

AI Model: granite-3-3-8b-instruct

Setup

Configuration

Framework LangGraph Architecture ReAct

Instructions Advanced configuration

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Agent preview

VB You: 10:29 PM

Can you explain the DTE CAP admission process for Maharashtra students?

College Admission Agent 10:29 PM

Certainly! The Common Admission Process (CAP) for engineering courses in Maharashtra is managed by the Directorate of Technical Education (DTE). Here's a simplified explanation of the process:

1. **Eligibility:** Students must have passed their 12th examination (HSC) with Physics, Chemistry, and Mathematics (PCM) subjects, scoring a minimum of 45%.

2. **Online Application:** Interested students need to fill out an online application form on the DTE Maharashtra website. This includes filling personal details, academic details, and course preferences.

3. **Choice Filling:** After registration, students are required to fill in their course and college preferences.

4. **CAP Round 1:** Based on the preferences filled and the student's rank in the entrance exam (like JEE Main or MHT-CET), seats are allotted. Students who accept the allotted seat formally secure it.

Type something... G

RESULTS

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New agent +

Deploy 🔗 🔒 ⓘ

Saved agents

From AgenticAI

**College Admission Agent**
Hello There! i am your college admission guide

Build

AI Model: granite-3-3-8b-instruct ▾

Setup ▾

Configuration ▴

Framework Architecture

LangGraph ▾ ReAct ▾

Instructions [Advanced configuration](#)

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Knowledge ▾

Tools ▴

Add a tool Create custom tool

Added tools (6)

Agent preview

VB You: 10:31 PM

Does MITAOE offer scholarships for girl students or economically weaker sections?

4Bb College Admission Agent 10:31 PM

MIT Academy of Engineering (MITAOE) does indeed offer scholarships for girl students and economically weaker sections. Here's a general overview:

1. **Girls' Scholarship Scheme:** MITAOE provides scholarships specifically for girl students to encourage their participation in engineering education.

2. **Economically Weaker Section (EWS) Scholarship:** The institute also offers scholarships for students from Economically Weaker Sections as per the government's guidelines.

For detailed information, including eligibility criteria, application process, and the exact amount of scholarship, it's best to refer to the official MITAOE website or contact their admissions office directly. They can provide the most accurate and up-to-date information.

Let me fetch the latest details for you using the RAGQuery tool.

Type something... 🔍 🔄

RESULTS

Deployed AI Agent

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Dallas ▾

VB

Deployment spaces / College Admission Agent Deployment / College Admission Agent /

College Admission Agent ✔ Deployed Online

API reference Test **Preview**

New chat +

V

You 10:44 PM

Hi There! i want to take admission in MIT Academy of engineering

👤

College Admission Agent 10:44 PM

Hello! I'm your College Admission Assistant, powered by Watsonx.ai. What would you like to know today? Specifically, are you interested in the admission criteria, application process, or perhaps some general information about MIT Academy of Engineering?

▶ How did I get this answer?

🔄

Type something... ▶

About this deployment ×

Name ✎
College Admission Agent

Description ✎
Hello There! i am your college admission guide

Deployment Details
Deployment ID: 4a6a74e2-18ce-4b...
Serving name: ✎
No serving name.
Software specification: ✎
[runtime-24.1-py3.11](#) ⚙️
Hardware specification: ✎
Extra extra small: 1 CPU and 2 GB RAM
Copies: ✎
1
Tags ✎
wx-agent
Associated asset ✎
🔗 [College Admission Agent](#)
72d9117e-ac48-4dc8-a5e0-e725df66306b

CONCLUSION

- Our College Admission Agent proves that IBM's Granite models and Cloud Lite services can power real, transformative applications. From admission guidance to deadline tracking, this assistant makes the journey easier, faster, and smarter—for both students and institutions.

GITHUB LINK

- [GITHUB link](#)

FUTURE SCOPE

- Multilingual support for regional and international students
- Integration with college ERPs and CRM tools
- Personalized recommendations using academic history or interests
- Voice-interaction layer using Watson Speech-to-Text
- Admin dashboard for live analytics and question trends

IBM CERTIFICATIONS

In recognition of the commitment to achieve
professional excellence



vaishnavi bansode

Has successfully satisfied the requirements for:

Getting Started with Artificial Intelligence



Issued on: Jul 19, 2025
Issued by: IBM SkillsBuild

Verify: <https://www.credly.com/badges/9dd6842b-bd54-4f45-a252-777180bd620f>



IBM **SkillsBuild**

Completion Certificate



This certificate is presented to
VAISHNAVI MILIND BANSODE

for the completion of
**Lab: Retrieval Augmented Generation with
LangChain**

(ALM-COURSE_3824998)

According to the Adobe Learning Manager system of record

Completion date: 25 Jul 2025 (GMT)

Learning hours: 20 mins



THANK YOU