# **API** Documentation

### **Contract Management**

This document provides the technical specification for the API endpoints related to managing student contracts, as defined in contract\_route.py. The endpoints are segregated by user roles: **Learning Advisor** and **Manager**.

#### **Learning Advisor Features**

These endpoints allow Learning Advisors to perform full CRUD operations on the contracts they are responsible for.

#### 1. Add Contract

Creates a new student contract.

- **Endpoint**: POST /contract/learningadvisor/add
- **Description**: Creates a new contract linking a student to a specific course. The employee\_id for the contract is automatically set to that of the logged-in Learning Advisor.
- Authentication: Learning Advisor Role Required.

## **Request Body**

| Field      | Туре   | Required | Description   |
|------------|--------|----------|---|
| id         | String | Yes      | A unique identifier for the new contract (e.g., "CT003"). |
| student_id | String | Yes      | The ID of the student for this contract.                  |
| course_id  | String | Yes      | The ID of the course for this contract.                   |

| course_date | Date    | Yes | The creation date of the course instance.    |
|-------------|---------|-----|--|
| tuition_fee | Integer | Yes | The agreed-<br>upon tuition fee.             |
| start_date  | Date    | Yes | The official start date of the study period. |
| end_date    | Date    | Yes | The official end date of the study period.   |

### **Example Request:**

```
{
    "id": "CT003",
    "student_id": "ST001",
    "course_id": "C002",
    "course_date": "2025-07-04",
    "tuition_fee": 3200000,
    "start_date": "2025-08-07",
    "end_date": "2026-02-07"
}
```

- 201 Created (Success)
  - Body: The newly created contract object.
- 400 Bad Request (Invalid Input)
  - ∘ Body:

```
{
    "message": "Invalid input",
    "error": ...
}
```

### 403 Forbidden (Unauthorized)

Body:

```
{
    "message": "Access denied for <user_role>"
}
```

### • 404 Not Found (Student or Course not found)

• Body:

```
"message": "Student not found" or "message": "Course not found"
}
```

### 409 Conflict (Duplicate Contract)

Body

```
{
    "message": "Contract existed"
}
```

### 2. Get All Contracts (Learning Advisor)

Retrieves all contracts managed by the logged-in Learning Advisor.

- **Endpoint**: GET /contract/learningadvisor/
- Authentication: Learning Advisor Role Required.

- 200 OK (Success)
  - Body: A JSON array of contract objects belonging to the authenticated user.

### 3. Search for Contract (Learning Advisor)

Retrieves a single contract by its ID, provided it is managed by the logged-in Learning Advisor.

- **Endpoint**: GET /contract/learningadvisor/search
- Authentication: Learning Advisor Role Required.

#### **Query Parameters**

| Parameter | Туре   | Required | Description                              |
|-----------|--------|----------|--|
| id        | String | Yes      | The unique ID of the contract to update. |

#### Responses

- 200 OK (Success)
  - **Body**: The requested contract object.
- 404 Not Found

```
• Body
{
    "message": "Contract not found"
}
```

## 4. Update Contract

Updates the details of an existing contract.

- **Endpoint**: PUT /contract/learningadvisor/update
- Authentication: Learning Advisor Role Required.

## **Query Parameters**

| Parameter | Туре   | Required | Description                              |
|-----------|--------|----------|--|
| id        | String | Yes      | The unique ID of the contract to update. |

#### **Request Body**

A JSON object containing the fields to be updated (e.g., payment\_status).

#### Responses

- 200 OK (Success)
  - Body

```
{
    "message": "Contract updated successfully"
}
```

#### 404 Not Found

• Body

```
{
    "message": "Contract not found"
}
```

### 5. Delete Contract

Deletes a contract from the system.

- **Endpoint**: DELETE /contract/learningadvisor/delete
- Authentication: Learning Advisor Role Required.

### **Query Parameters**

| Parameter | Туре   | Required | Description                              |
|-----------|--------|----------|--|
| id        | String | Yes      | The unique ID of the contract to delete. |

- 200 OK (Success)
  - Body:

```
{
    "message": "Contract deleted successfully"
}
```

#### 404 Not Found

Body

```
{
    "message": "Contract not found"
}
```

### **Manager Features**

These endpoints provide Managers with read-only access to all contracts across the system.

### 1. Get All Contracts (Manager)

Retrieves a list of every contract in the system.

- Endpoint: GET /contract/manager/
- Authentication: Manager Role Required.

#### Responses

- 200 OK (Success)
  - Body: A JSON array of all contract objects in the database.
- 403 Forbidden (Unauthorized)
  - ∘ Body:

```
{
    "message": "Access denied for <user_role>"
}
```

### 2. Get Contract by ID (Manager)

Retrieves any single contract by its unique ID.

- **Endpoint**: GET /contract/manager/search
- Authentication: Manager Role Required.

## **Query Parameters**

| Parameter | Туре   | Required | Description                                  |
|-----------|--------|----------|--|
| id        | String | Yes      | The unique ID of the contract to search for. |

- 200 OK (Success)
  - Body: The requested contract object.
- 404 Not Found
  - o Body:

```
{
    "message": "Contract not found"
}
```