

# API Documentation

## Student & Enrolment Management

This document provides the technical specification for the API endpoints related to managing student profiles and their course enrolments, as defined in student\_route.py. The endpoints are segregated by user roles.

### General Features (Learning Advisor & Manager)

These endpoints provide read-only access to student and enrolment data for authorised administrative staff.

#### 1. Get All Students

Retrieves a list of all student profiles in the system.

- **Endpoint:** GET /student/
- **Description:** Fetches a complete list of all student records.
- **Authentication:** **Learning Advisor** or **Manager** Role Required.

#### Responses

- **200 OK (Success)**
  - **Description:** Returned with a list of all student profiles.
  - **Body:**

```
[
  {
    "id": "ST001",
    "full_name": "Van der Linde Dutch",
    "date_of_birth": "2003-12-08",
    "contact_info": "0123456789 – Father"
  },
  {
    .
    .
  }
]
```

- 403 Forbidden (Unauthorized)
  - **Description:** Returned if the user does not have the required role.
  - **Body:**

```
{
  "message": "Access denied for Teacher"
}
```

## 2. Search for Student

Retrieves a single student profile by their unique ID.

- **Endpoint:** GET /student/search
- **Authentication:** **Learning Advisor** or **Manager** Role Required.

### Query Parameters

Parameter	Type	Required	Description
id	String	Yes	The unique ID of the student to search for.

### Responses

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

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

## 3. Get All Enrolments

Retrieves a list of all enrolment records in the system.

- **Endpoint:** GET /student/enrolment/
- **Authentication:** **Learning Advisor** or **Manager** Role Required.

## Responses

- **200 OK (Success)**
  - **Body:** A JSON array of all enrolment objects.

## 4. Search for Enrolment

Retrieves a single enrolment record by its unique ID.

- **Endpoint:** GET /student/enrolment/search
- **Authentication:** **Learning Advisor** or **Manager** Role Required.

## Query Parameters

Parameter	Type	Required	Description
id	String	Yes	The unique ID of the enrolment to search for.

## Responses

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

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

## Learning Advisor Features

These endpoints allow Learning Advisors to perform full CRUD operations on student and enrolment records.

### 5. Add Student

Creates a new student profile.

- **Endpoint:** POST /student/learningadvisor/add
- **Authentication:** Learning Advisor Role Required.

#### Request Body

Field	Type	Required	Description
id	String	Yes	A unique identifier for the student.
fullname	String	Yes	The student's full name.
contact_info	String	Yes	Contact details for the student/guardian.
date_of_birth	Date	Yes	The student's date of birth (YYYY-MM-DD).

### 6. Update Student

Updates the details of an existing student profile.

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

#### Query Parameters

Parameter	Type	Required	Description
id	String	Yes	The unique ID of the student to update

## Request Body

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

## Responses

- **200 OK (Success)**

- **Body:**

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

- **400 Bad Request (Constraint Violation)**

- **Description:** Occurs if the student is linked to other records (e.g., contracts) and cannot be deleted.

- **Body:**

```
{
  "message": "Violate database constraint",
  "error": ...
}
```

## 8. Add Enrolment

Creates a new enrolment record, officially linking a student's contract to a course.

- **Endpoint:** POST /student/enrolment/learningadvisor/add
- **Authentication:** Learning Advisor Role Required.

## Request Body

Field	Type	Required	Description
id	String	Yes	A unique identifier for the enrolment.
contract_id	String	Yes	The ID of the associated contract.
student_id	String	Yes	The ID of the student being enrolled.
course_id	String	Yes	The ID of the course for enrolment.
course_date	Date	Yes	The creation date of the course instance.
enrolment_date	Date	Yes	The date of official enrolment.

## Responses

- **201 Created (Success)**
  - **Body:** The newly created enrolment object.
- **404 Not Found**
  - **Body:**

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

## 9. Update & Delete Enrolment

Updates or deletes an existing enrolment record.

- **Endpoints:**
  - PUT /student/enrolment/learningadvisor/update
  - DELETE /student/enrolment/learningadvisor/delete
- **Authentication: Learning Advisor Role Required.**

### Query Parameters

Parameter	Type	Required	Description
id	String	Yes	The unique ID of the enrolment to modify

### Responses

- **200 OK (Success)**
  - **Body:**

```
{
  "message": "Enrolment updated successfully"
}
or
{
  "message": "Enrolment deleted successfully"
}
```

- **404 Not Found**
  - **Body:**

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

## Teacher Features

This endpoint provides Teachers with read-only access to student information relevant to their classes.

### 10. Get Students by Class

Retrieves a list of all students enrolled in a specific class.

- **Endpoint:** GET /student/teacher/
- **Authentication:** Teacher Role Required.

#### Query Parameters

Parameter	Type	Required	Description
id	String	Yes	The unique ID of the class

#### Responses

- **200 OK (Success)**
  - **Body:** A JSON array of student profiles for the specified class.
- **404 Not Found**
  - **Body:**

```
{
  "message": "Class not found"
}
or
{
  "message": "Missing class ID in query params"
}
```