



THE UNIVERSITY OF TEXAS  
AT ARLINGTON

# PERFORMANCE OF MSC Academic Program (COMPUTER SCIENCE)

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# Home Page

## **About Section:**

- Concise overview of mission, values, and key highlights.

## **Services Segment:**

- Various offerings highlighted, focusing on student-centric resources, faculty support, and quality assurance.

## **Contact Section:**

- Provides contact information, encourages inquiries for direct interaction.

## **Blog Section:**

- Keeps the community informed with relevant updates, events, and insights.

## **Login Feature:**

- Grants secure access to personalized areas for students, faculty, and administrators.

## **Overall Design:**

- Homepage designed to seamlessly blend informative content with interactive elements, fostering a dynamic and inclusive academic environment.

## MSc in Computer Science

Welcome to the MSc in Computer Science program. Our program is designed to provide you with a comprehensive understanding of computer science principles and their practical applications.

Throughout the program, you'll have the opportunity to explore cutting-edge technologies, work on real-world projects, and gain valuable skills that are highly sought after in today's technology-driven world.

### Our Objectives

Our program is designed to help you achieve skills and knowledge in the following areas:

#### Problem-solving skills

Develop strong problem-solving skills and an understanding of advanced algorithms and data structures, which are fundamental to computer science.

#### Machine learning and AI

Specialize in machine learning and AI, becoming proficient in these advanced areas of computer science.

#### Cybersecurity

Gain expertise in cybersecurity, including ethical hacking, network security, and data protection, while instilling ethical considerations in technology practices.

#### Database management

Provide advanced knowledge in database management systems, data modeling, and data analysis, which are essential skills for various careers in computer science.

#### Software engineering

Prepare students to work on large-scale software projects, emphasizing software design principles, development methodologies, and collaboration skills.

#### Computer graphics

Focus on computer graphics, visualization, and multimedia technologies, developing skills in creating graphical user interfaces and data visualization.

#### Research skills

Equip students with research skills necessary for conducting original research, including designing experiments, collecting data, and publishing findings.

#### Ethics in computing

Address ethical issues in computing, emphasizing responsible technology use, privacy, and security considerations.

#### Operating systems

Gain a deeper understanding of operating systems, distributed computing, and system-level software development.

# Student Page

## **Profile Section:**

- Manage academic information.
- Track progress and update personal details.

## **Courses Segment:**

- Access detailed course information.
- View syllabi, schedules, and assignments.

## **Tests Section:**

- Facilitates exam preparation.
- Provides access to past exams, study materials, and practice quizzes.

## **Notifications:**

- Keeps students informed about updates, deadlines, and announcements.

## **Chat Feature:**

- Promotes real-time communication.
- Fosters collaboration among students for quick support.

[Profile](#) [Courses](#) [Tests](#) [Notifications](#) [Chat](#)



**Ruban Eswaravelu**

Email: rxe8133@mavs.uta.edu

Role: Student

### Edit Profile

Name:

Ruban Eswaravelu

Email:

rxe8133@mavs.uta.edu

Phone:

817-630-1307

Format: XXX-XXX-XXXX

Role:

Student

Save

# Instructor Page

## **Profile:**

- Manage academic credentials and professional details.

## **Courses:**

- Organize and present course materials.
- Track student progress and manage assignments.

## **Tests:**

- Seamlessly create and assess exams.

## **Notifications:**

- Stay updated on announcements and administrative matters.

## **Chat:**

- Facilitate quick communication, enhancing collaboration.

## **Students:**

- Monitor and engage with student performance for a supportive teaching environment.

[Profile](#)[Courses](#)[Students](#)[Tests](#)[Notifications](#)[Chat](#)**Ruban Eswaravelu**

Email: ruban151282@gmail.com

Role: Instructor

### Edit Profile

Name:

Email:

Phone:

Format: XXX-XXX-XXXX

Role:



# Program Co-ordinator Page

## **Profile Section:**

- Manage professional information and roles.

## **Notifications:**

- Stay informed of critical updates for timely decision-making.

## **Chat Feature:**

- Facilitates real-time collaboration with instructors, administrators, and students.

## **Students Section:**

- Provides a comprehensive overview of student performance.

## **Integrated Approach:**

- Ensures effective communication, coordination, and oversight.



**Rakku**

Email: rakshithsingh5@gmail.com

Role: ProgramCoordinator

[Profile](#)

[Students](#)

[Notifications](#)

[Chat](#)

### Edit Profile

Name:

Rakku

Email:

rakshithsingh5@gmail.com

Phone:

123-456-7890

Format: XXX-XXX-XXXX

Role:

ProgramCoordinator

[Save](#)

# Admin Page

## Profile Section:

- *Oversee professional details and responsibilities.*
- *Centralized hub for administrators.*

## Notifications:

- *Stay informed about critical updates.*
- *Facilitates swift decision-making.*

## Chat Feature:

- *Streamlines communication among administrative staff.*
- *Ensures effective collaboration.*

## Integrated Suite:

- *Empowers administrators.*
- *Maintains program efficiency and upholds administrative standards effectively.*



**Admin1**

Email: Admin@uta.com

Role: Admin

[Profile](#)[Users](#)[Notifications](#)[Chat](#)

### Edit Profile

Name:

Email:

Phone:

Format: XXX-XXX-XXXX

Role:

# Quality Assurance Page

## **Profile Section:**

- Manage professional details and roles within the quality assurance framework.

## **Notifications:**

- Stay informed with real-time updates, ensuring prompt responses to quality-related matters.

## **Chat Feature:**

- Foster collaboration among QA members and stakeholders, promoting efficient communication.

## **Policies:**

- Outline established standards and guidelines to ensure consistency and adherence to quality benchmarks.

## **Recommendations:**

- Provide a platform for continuous improvement, allowing QA personnel to offer insights and enhancements.

## **Integrated Approach:**

- Contributes to maintaining and improving high academic standards through a holistic and collaborative quality assurance strategy.

[Profile](#)[Policies](#)[Recommendations](#)[Notifications](#)[Chat](#)**Jayanth**

Email: jayanthyennana@icloud.com

Role: Quality Assurance

### Edit Profile

Name:

Email:

Phone:

Format: XXX-XXX-XXXX

Role:

# Implementation

## Frontend (React):

- Develop React components for user dashboards, profile management, and dynamic content rendering.
- Utilize React Router for navigation and state management for handling user data.

## Backend (Laravel):

- Create RESTful APIs using Laravel to serve data to the React frontend.
- Use Laravel Eloquent ORM for database interactions and implement real-time communication with Laravel Echo.



### **Features Implementation:**

- Implement chat functionality and notifications using real-time communication libraries.
- Set up endpoints for courses, tests, blog posts, and user-related information.
- Manage user authentication securely with Laravel Passport and enforce roles and permissions.

### **Policy and Recommendation:**

- Enforce policies and guidelines using Laravel middleware.
- Create endpoints for applying and managing recommendations for continuous improvement.

### **User Management:**

- Develop user management functionality, including roles and permissions.
- Ensure secure admin-level functionalities and protect user data with HTTPS.

### **Overall Architecture:**

- Maintain a clear separation of concerns with React for frontend and Laravel for backend.
- Implement secure communication between frontend and backend, emphasizing data protection.

# Task and Minutes

## Task Names :

- Homepage, About Us, Services Page : Ruban
- Contact Us Page, User Profile – Administrator: Srilekhya
- Login/Sign-up Landing, Forget Password Page, CSS styling: Umesh
- User Profile –Student, Instructor, Administrator, Blog: Yashwanth
- User Profile – Quality Assurance Officer, Program Coordinator: Jayanth

## Number of hours allocated:

- Actual hours put in : 10 hours per member (for the final Phase and PPT)\
- **Are all members equally contributing: YES**

**Thank you**