**I. Preliminary Planning (Completed)**

Requirements and Use Cases (Completed)

* **Objective:**
  + Define the scope and boundaries of the system.
  + Identify and document functional, usability, and security requirements.
  + Create UML diagrams to illustrate use cases and actor-system interactions.
* **Importance:** Establishing clear requirements and understanding user interactions are fundamental for successful project execution.

System Design (Completed)

* **Objective:**
  + Develop a high-level architectural design.
  + Identify major components and their interactions.
* **Importance:** Having a clear system design is crucial to ensure that the development phase is aligned with project goals.

**II. Development Phase**

Detailed Design (October 1 - October 15)

* **Objective:**
  + Refine the architecture based on detailed analysis.
  + Design database schema to support data requirements.
  + Design RESTful APIs for client-server communication.
  + Select appropriate technologies and frameworks.
* **Importance:** Detailed design helps in eliminating ambiguities and lays a strong foundation for the coding phase.

Backend Development (October 16 - November 15)

* **Objective:**
  + Develop server, database, and application logic.
  + Implement business logic for each module as per requirements.
  + Develop preliminary matching algorithms for TA and course matching.
* **Importance:** Backend development is crucial as it forms the backbone of the application, handling data management, business logic, and server configuration.

Frontend Development (November 1 - November 30)

* **Objective:**
  + Design and develop user interfaces for each user role.
  + Implement client-side logic to interact with the backend.
  + Ensure the usability and accessibility standards are met.
* **Importance:** Frontend development directly affects user experience and satisfaction, making it critical for system acceptance.

Integration (November 16 - November 30)

* **Objective:**
  + Merge frontend and backend components.
  + Ensure seamless communication between client and server.
  + Resolve any integration issues.
* **Importance:** Integration is vital to ensure that different parts of the system work together seamlessly.

**III. Testing Phase**

System Testing (December 1 - December 4)

* **Objective:**
  + Conduct functional, performance, and security testing.
  + Identify and fix bugs.
  + Ensure system meets all defined requirements.
* **Importance:** System testing is crucial for ensuring the reliability, security, and performance of the application.

User Acceptance Testing (December 5 - December 6)

* **Objective:**
  + Collect feedback from end-users.
  + Make necessary adjustments to meet user expectations.
* **Importance:** UAT ensures that the system is ready for deployment and will meet user needs.

**IV. Deployment and Monitoring Phase**

Deployment (December 7)

* **Objective:**
  + Deploy the system to a production environment.
  + Verify the deployment by conducting a final review.
* **Importance:** Deployment is the step where the system goes live, making it crucial for project success.

Post-Deployment Monitoring (December 8 - December 10)

* **Objective:**
  + Monitor system performance and user interactions.
  + Identify and fix any post-deployment issues.
* **Importance:** Post-deployment monitoring is crucial for maintaining system performance and user satisfaction.

**V. Documentation and Review**

Documentation (December 10 - December 11)

* **Objective:**
  + Document all project phases, decisions, and configurations.
  + Create user manuals and technical documentation.
* **Importance:** Proper documentation is vital for future maintenance, support, and audit purposes.

Project Review and Closure (December 11, 2023)

* **Objective:**
  + Evaluate project performance against initial objectives.
  + Identify lessons learned and best practices for future projects.
* **Importance:** Project review provides insights into project management practices and prepares the team for future projects.

**VI. Support and Maintenance (Ongoing)**

* **Objective:**
  + Provide necessary support and training to end-users.
  + Monitor system performance and implement updates as necessary.
* **Importance:** Ongoing support ensures the system continues to meet user needs and performs optimally over time.