AMMAN ARAB UNIVERSITY

Faculty of Information Technology

TRACE

PROJECT CHARTER

DATE: NOVEMBER 26, 2025

Project Title: TRACE - Transfer Recognition and Automated Course Engine

Project Start Date:
November 1, 2025

Projected Finish Date:
June 15, 2026

Students

Sdra Osama Mohammed Awameh	202210368
Rasha Khalid Waleed Alsaleh	202210632

Amman - Jordan
2025/2026

Budget Information:

The Faculty of Information Technology has allocated a minimal budget for this student-led development project. The estimated total budget for the 7-month project duration is approximately **$950 - $1,100**, broken down as follows:

- Initial Development Costs (Year 1): $400 - $550
- Development tools, libraries, and APIs: $200
- Hosting & Infrastructure (Hostinger shared hosting, domain): $51
- Training & Documentation materials: $240
- Operational costs during development period (5 months at ~$110/month): $550

Ongoing Annual Costs (Post-Launch): Approximately $1,351/year for hosting, maintenance, and system updates.

The majority of project value comes from student development labor, faculty expertise, and university infrastructure support.

Project Managers:

Rasha Khalid Waleed Alsaleh & Sdra Osama Mohammed Awameh
Students, Software Engineering Program
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Project Objectives:

Develop an automated web-based system to streamline and standardize the course equivalency and credit transfer evaluation process for the Faculty of Information Technology at Amman Arab University. The system will:

- Automate the analysis of course descriptions, learning outcomes, and topics to identify potential equivalencies using structured text-matching techniques, reducing manual evaluation time by at least 70%
- Implement an intelligent matching algorithm achieving a minimum accuracy rate of 85% when compared to expert faculty evaluations, ensuring consistency across different evaluators
- Generate accurate, policy-compliant official equivalency reports automatically that meet both university and Ministry of Higher Education standards
- Support multiple transfer scenarios including inter-university transfers, intra-university major changes, and diploma-to-bachelor bridging programs
- Create a centralized knowledge base of equivalency decisions to improve future evaluations and maintain institutional memory

Success Criteria:

- System accurately suggests course equivalencies with at least 85% alignment with expert faculty decisions
- Average evaluation time reduced from several hours to under 30 minutes per transfer case
- All generated reports comply with university policies and Ministry of Higher Education regulations
- System successfully processes at least 50 test cases covering all transfer scenarios (inter-university, intra-university, bridging) during acceptance testing
- Positive user acceptance from at least 80% of faculty evaluators and department heads during pilot testing
- System maintains 99% uptime during operational hours with no critical security vulnerabilities
- Complete documentation delivered including user manuals, technical documentation, and training materials
- Project completed within the 7-month timeline and allocated budget

Approach:

- **Methodology:** Agile Scrum with 2-week sprint cycles enabling iterative development and continuous feedback from supervisors and stakeholders
- **Requirements Gathering:** Conduct structured interviews with department heads, professors, and students who have experienced transfer processes; analyze historical transfer case data to identify patterns and requirements
- **System Design:** Design a multi-tier web architecture with role-based access control (Admin, Professor, Head of Department); implement MySQL database for structured course and transfer data storage
- **Development:** Build frontend using HTML, CSS, JavaScript and backend using PHP; integrate intelligent text-matching algorithms for course similarity detection; implement automated PDF report generation system
- **Testing Strategy:** Conduct comparative testing where automated suggestions are validated against manual faculty evaluations; perform comprehensive unit, integration, system, and user acceptance testing
- **Validation:** Pilot test with real transfer cases under faculty supervision to ensure accuracy and reliability before full deployment
- **Documentation:** Produce comprehensive user guides for each role, technical documentation for system maintenance, and training materials for faculty adoption
- **Quality Assurance:** Regular code reviews, security assessments, and compliance verification against university policies throughout development

Roles and Responsibilities:

Name	Role	Position	Contact Information
Dr. Mejhem Altarawneh	Project Sponsor / Primary Stakeholder	Head of IT Department, AAU	m.tarawneh@aau.edu.jo
Dr. Rami Sihwail	Executive Sponsor	Dean, Faculty of IT, AAU	r.sihwail@aau.edu.jo
Dr. Marwan Alseid	Project Supervisor	Assistant Professor, IT Department, AAU	m.alseid@aau.edu.jo
Dr. Alaa Abuthawabeh	Project Co-Supervisor	Assistant Professor, IT Department, AAU	a.abuthawabeh@aau.edu.jo
IT Department Faculty	Subject Matter Experts / End Users	Professors, IT Department, AAU	Various
Rasha Alsaleh	Co-Project Manager & Developer	Software Engineering Student, AAU	rasha.k.alsaleh@gmail.com
Sdra Awameh	Co-Project Manager & Developer	Software Engineering Student, AAU	awamasdra@gmail.com

Sign-Off:

(Signatures of all the above stakeholders)

Dr. Mejhem Altarawneh - Project Sponsor Date:

Dr. Rami Sihwail - Executive Sponsor Date:

Dr. Marwan Alseid - Project Supervisor Date:

Dr. Alaa Abuthawabeh - Project Co-Supervisor Date:

Rasha Khalid Alsaleh - Co-Project Manager Date:

Sdra Osama Awameh - Co-Project Manager Date:

Comments:

(Handwritten or typed comments from above stakeholders, if applicable)

[This section to be completed by stakeholders upon review]