Practicum Project Proposal Guidelines

The purpose of this document is to aid Carnegie Mellon University (CMU) Africa MSIT Practicum Sponsors in creating an appropriate proposal document. The proposal should highlight the main details and issues regarding the proposed practicum project. The proposal is how you “sell” your project so that it is among the projects selected by students this semester. Students are looking for a clearly defined project that will exercise and expand their IT skills. Students have skills in data science, software engineering, cyber security, telecommunications and networking, IT entrepreneurship, and energy systems.

Definitions

**Practicum** - An opportunity in the CMU curriculum for students in the second year of their master’s degree program to refine and reinforce the skills they have acquired during their first year. Short-term, real-world projects are sought that can thoroughly exercise these skills in a fixed amount of time. The practicum is 14 weeks in length.

**Sponsor / Sponsoring Organization** - The Sponsor is the organization that agrees to support a CMU practicum project. They provide the project definition and necessary resources to complete the project. The Sponsor designates an individual to be the project client for the team.

**Team** – A group of 3 to 4 CMU students, who together will work part-time (20 hours per week per student) on the Sponsor’s project. A CMU faculty member supports the team’s progress but does not interact directly with the Sponsor. The student team is expected to perform as if they are a contract team that negotiates the scope and details of the project directly with the client.

**Client** – The Sponsor’s designated individual who interacts directly with the team. For the initial weeks of the practicum, the client (or client’s designee), must be available at least twice a week (remotely is acceptable) to facilitate learning the new application domains, technologies, etc. Thereafter, the client should be regularly available at least once a week for the remainder of the project.
Proposal Elements

The proposal should contain the following:

1. **Name of the Organization**
2. **Client Contact Information** (name, title, phone number, email address) including general availability in terms of time of day and day of week most appropriate for meeting and/or consultations.
3. **Title or Name of Project.** (An item often left out). Please include the name of the project.
4. **High-Level Organizational Need.** Without reference to any specific technology or solution, briefly state what is your high level need. For example, "To simplify customer ordering" rather than "An artificial-intelligence supported HTML5 order form."
5. **Organization Background.** A brief overview of the business for the Practicum Sponsor Organization and the specific department that will be responsible for the conduct of the project.
6. **Project Overview.** Describe the specific problem you are trying to solve, its strategic or operational relevance and the benefits to the organization and its customers including internal groups. Also, describe the scope of the project as you see it, including the core problem, its dependencies, and the role of the team in developing a solution or possibly a part of the larger solution given the time and resources available. The project should have discrete goals rather than simply additional workers on an ongoing project.
7. **Key project outcomes and deliverables.** Please specify the desired outcomes and deliverables of the project.
8. **Technology Skills and competencies required by the Practicum Student team.** Please identify any known technical skills and competencies you believe are required to deliver the desired results and deliverables.
9. **Challenges and Risks.** Briefly outline any serious challenges that you believe exist and as well the risks these challenges can present, e.g. technical, organizational, scheduling, or communication.
10. **Preliminary Work Plan.** Please provide a brief overview of the sequence of the various key tasks and desired outcomes. This will assist the student team to develop the SOW.

You may submit your proposal online at [https://www.africa.engineering.cmu.edu/industry/masters-practicum.html](https://www.africa.engineering.cmu.edu/industry/masters-practicum.html) or by emailing to the address below.

Thank you for your interest in becoming a Practicum Project Sponsor. Should you have any questions, please email or call Professor Timothy X Brown.

**Professor Timothy X Brown**  
practicum@rwanda.cmu.edu  
+250 787674 062