

C769 Task 1 IT Capstone Topic Approval Form

The purpose of this document is to help you clearly explain your capstone topic, project scope, and timeline and to ensure that they align with your degree emphasis. Without clearly addressing each of these areas, you will not have a complete and realistic overview of your project, and your instructor cannot accurately assess whether your project will be viable for the purposes of these courses.

Complete this form and send it (via UGCapstoneIT@WGU.edu) to your instructor for approval. Once approved, you will receive a signed document in PDF format that you can upload as part of Task 1.

It is the policy of Western Governors University (WGU) that student capstone projects should not be based on or include, without authorization, restricted information. Restricted information is any proprietary or classified information or material belonging to your employer or any other third party. You acknowledge that you will not use restricted information in your capstone project without obtaining the third party's permission by using the **"IT Capstone Project Restricted Information Authorization Form"** found in the Supporting Documents section of Task 1.

DEGREE EMPHASIS: Cybersecurity and information assurance

ANALYSIS:

Project Topic – Implement zero trust security model for fictional financial (FFFirm) firm

Problem Statement or Project Purpose – FFFirm is facing many cyber threats which their perimeter-based security model cannot prevent. This is exacerbated due to remote work & cloud-based services. The purpose of this project is to improve the firm's cybersecurity posture with a zero-trust architecture.

DESIGN and DEVELOPMENT:

Project Scope

- a. Project Goal(s) and Supporting Objectives – Implement comprehensive zero trust architecture. Objectives include:
 - i. Enhance IAM
 - ii. Network segmentation
 - iii. Monitoring systems
 - iv. Improve encryption practices
 - v. Improve endpoint & mobile security
 - vi. Granular access control
 - vii. Improve employee training
- b. Project Outcomes and Deliverables –
 - i. IAM w/ MFA & SSO



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- ii. Network segmentation
- iii. SEIM
- iv. UEBA
- v. E2E encryption
- vi. EDR
- vii. MDM
- viii. Granular access policies
- ix. Improved employee training program

IMPLEMENTATION and EVALUATION:

Describe how you will approach the execution of your project – The project will start with assessment of the current infrastructure. Then we will systematically progress through the different components, with implementation and evaluation occurring at each iteration.

IRB REVIEW:

- ✓ **This project does not involve human subjects research and is exempt from WGU IRB review.**

COURSE INSTRUCTOR SIGNATURE:

Jim Ashe, Ph.D. Mathematics

COURSE INSTRUCTOR APPROVAL DATE:

Wednesday, August 28, 2024

